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P. 5  
1904/5

The Agricultural College  
==== Register ====

The State Agricultural  
and Mechanical College

Greensboro, N. C.

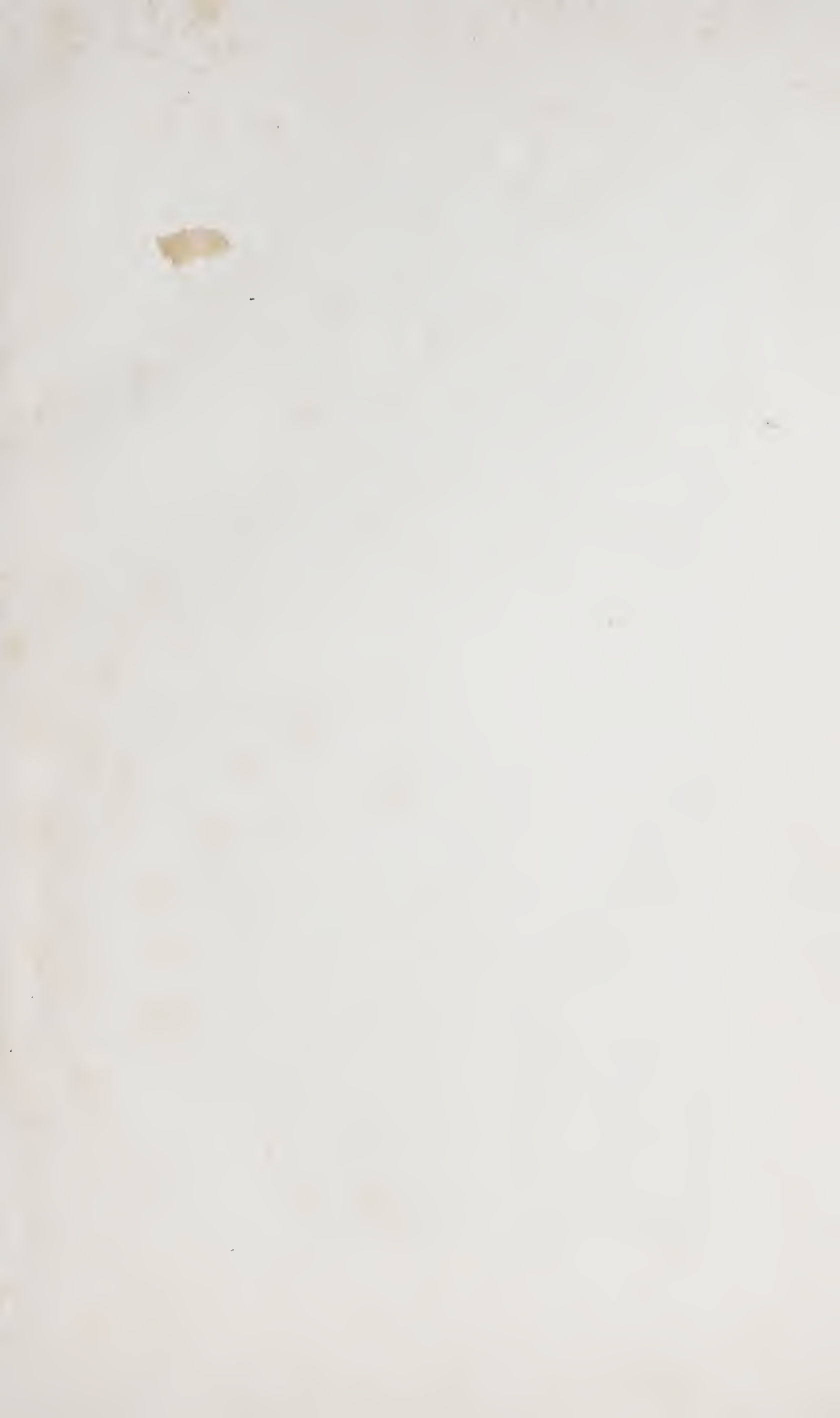


A young man who cannot spend time to examine  
this Catalogue, pays a high price for the time saved.

Catalogue 1904-1905

Published by the College, May 1904.











NORTH DORMITORY.

AGRICULTURE AND ADMINISTRATION BUILDING.  
CLASS IN MARKET GARDENING.

MECHANICAL BUILDING.







NORTH DORMITORY.



MECHANICAL BUILDING.



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Tenth Annual Catalogue

OF THE

State Agricultural and Mechanical College

FOR THE

Colored Race,

Greensboro, North Carolina.

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1904-1905.

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GREENSBORO, N. C.:

J. M. REECE & COMPANY, BOOK AND JOB PRINTERS

1904.

## **Calendar 1904-1905.**

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SEPTEMBER 1, 2—Entrance Examinations and Examinations for removal of conditions.

SEPTEMBER 3.—Registration of all students.

SEPTEMBER 5—Fall Term begins.

NOVEMBER 25—Fall Term ends.

NOVEMBER 28—Winter Term begins.

FEBRUARY 27—Spring Term begins.

APRIL 23—Baccalaureate Sermon.

APRIL 27—Commencement.

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## **Holidays.**

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THANKSGIVING DAY.

ARBOR DAY.

CHRISTMAS VACATION—Dec. 23, 1904—Jan. 2, 1905.

DOUGLAS' BIRTHDAY.

LINCOLN'S BIRTHDAY.

WASHINGTON'S BIRTHDAY.

MORRILL'S BIRTHDAY.

### **Board of Trustees.**

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First Congressional District—W. R. WILLIAMS.

Second Congressional District—W. A. DARDEN.

Third Congressional District—W. H. HAMMOND.

Fourth Congressional District—J. B. PHILLIPS.

Fifth Congressional District—J. I. FOUST.

Sixth Congressional District—D. D. CARLYLE.

Seventh Congressional District—W. L. KLUTTZ.

Eighth Congressional District— —————.

Ninth Congressional District—J. O. ALEXANDER.

Tenth Congressional District—M. W. BELL.

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### **Members-at-Large.**

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M. C. S. NOBLE.

GEORGE T. DUNLAP.

A. M. SCALES.

J. L. CURRIE.

H. C. TYSON.

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### **Officers of Trustee Board.**

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A. M. SCALES, CHAIRMAN, Greensboro, N. C.

S. A. KERR, SECRETARY AND TREASURER, Greensboro, N. C.



## Faculty and Officers for 1904-1905.

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### JAMES B. DUDLEY, A. M., PRESIDENT.

Shaw University; A. M., Livingston College. Teacher in Public School 1876-1880. Principal Peabody Graded School 1880-1896. Present position since 1896.

### JOHN H. BLUFORD, B. S.,

#### PROFESSOR OF AGRICULTURE AND CHEMISTRY.

Howard University. Formerly teacher in Washington Public School 1898-1899; "University Scholar in Chemistry." Graduate School, University of Pennsylvania 1899-1900; Graduate student, Chemistry and Agriculture, Cornell University 1900-1901; Third Assistant Principal, Instructor in Latin and English, Summer High School, St. Louis, Mo., 1901-1902. Present position since 1902.

### ADAM WATSON, B. S.,

#### PROFESSOR OF MECHANICAL DRAWING AND ARCHITECTURE.

A. & M. College, Greensboro, N. C. High Point Normal and Industrial School 1890-1901; Assistant in Mechanical Department A. & M. College 1901-1902. Present Position 1902.

### J. W. LANDRETH,

#### HEAD OF THE DEPARTMENT OF INDUSTRIES.

### CHARLES H. MOORE, A. M.,

#### PROFESSOR OF ENGLISH.

Amherst College, Massachusetts. Principal Graded School, Greensboro, N. C., 1878-1880. A. M., Amherst College 1885. Chair of Ancient Language Bennett College 1885-1891. Present position since 1897.

### S. P. SEBASTIAN,

#### ASSISTANT ENGLISH DEPARTMENT.

### P. E. ROBINSON, A. AGR.,

#### ASSISTANT IN AGRICULTURE AND VETERINARY SCIENCE.

A. & M. College, Greensboro, N. C. Present position since 1901.

### W. F. ROBINSON, B. AGR.,

#### FLORIST AND ASSISTANT IN HORTICULTURE.

A. & M. College, Greensboro, N. C. Present Position since 1903.

S. A. KERR,  
SECRETARY AND TREASURER.

\* \_\_\_\_\_

TINNER.

\* \_\_\_\_\_

INSTRUCTOR IN BRICKLAYING AND PLASTERING.

C. N. EVANS,  
BLACKSMITHING.

W. N. NELSON,  
CARPENTERING.

\* \_\_\_\_\_

SHOEMAKING.

JUNIOUS ROOKS,  
STEWARD.

J. ELMER DELLINGER, M. D.,  
COLLEGE PHYSICIAN.

Shaw University.—Formerly Professor Physiology and Chemistry in Shaw University. Resident Physician and Surgeon in Charge Leonard Medical Hospital, and late Major and Surgeon of Third North Carolina Volunteer Infantry, U. S. A.

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\*To be appointed.

# The Agricultural and Mechanical College

FOR THE COLORED RACE.

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This College was established by an act of the General Assembly of North Carolina, ratified March 9, 1891. The leading object of the institution is declared by the Act to be instruction in practical agriculture, the mechanic arts and such branches of learning as relate thereto.

The management and control of the College and the care and preservation of all its property is vested in a Board of Trustees, consisting of fifteen members, one from each Congressional District and five at large, who are elected by the General Assembly for a term of six years.

The Trustees, by the Act of the Legislature, have power to prescribe rules for the management and preservation of good order and morals at the College; to elect the president, instructors, and as many other officers and servants as they shall deem necessary; have charge of the disbursements of the funds, and have general and entire supervision of the establishment and maintenance of the College.

The Board is empowered to receive any donation of property, real or personal, which may be made to the College, and have power to receive from the United States the proportion of funds given to the institution for agricultural and mechanical training.

The financial support of the College for the payment of salaries and purchase of apparatus and equipment is derived, for the most part, from the United States, under an Act of Congress, known as the "Morrill Act," passed August 20, 1890. This Act makes an annual appropriation for each State and Territory for the endowment and



support of Colleges for the benefit of agriculture and mechanic arts, to be applied "only to instruction in agriculture, the mechanic arts, the English language and the various branches of mathematical, physical, natural and economic sciences, with special reference to their application in the industries of life and to the facilities of such instruction."

The college also receives an appropriation from the State nearly equal to the Federal appropriation, for general maintenance, which cannot be provided for under the laws governing the use of the Federal appropriation.

The citizens of Greensboro donated twenty-five acres of land and \$8,000, to be used in construction of buildings. In 1893 this was supplemented by an appropriation of \$10,000 by the General Assembly. The main building, one of the finest school edifices in North Carolina, was completed in 1893, and the school opened in the fall of that year. A large dormitory, which cost \$6,000, a complete laundry and a green-house have been added.

In the summer of 1895, the Mechanical Building, a large two-story brick structure, 38 by 119 feet, was erected at a cost of about \$9,000. This building, by the expenditure of about \$7,000, has been supplied with probably the finest and most modern equipments of any school in the State.

The Trustees invite the careful consideration of the colored people of North Carolina, particularly the educators among them and leaders of thought, to the grand opportunities offered by the State and aided by the United States, to the colored youth to thoroughly equip themselves for the battle of life and prepare to successfully work their way as "breadwinners" and secure honorable independence, carrying with it the highest type of American citizenship. Brain and hands are here educated together.

Full 80 per cent. of the colored people in this State live in the country and subsist on agriculture. The future of the colored race in the South depends upon the owner-

ship of farm lands and their intelligent and skillful treatment by colored farmers. This field is free from competition and race feeling. Owners of large tracts of land now yielding nothing will be only too glad to rent them to the skilled farmer who graduates from an agricultural college, and also provide him with stock and implements of husbandary.

The young man who leaves this College, with honor, a good character and a well-trained mind; who is familiar with science and art relating to his calling in agriculture, mechanics or any of the trades, will not be compelled to canvass the country seeking employment. Capital will be looking for him to place him in charge of lands and stock, to handle machinery and direct unskilled labor. Wherever skilled labor is found among producers, turning the wheels of industry that increase the wealth of the world, there will be found graduates of the Agricultural and Mechanical College.

North Carolina is an agricultural State. Her manufacturing interests are increasing in a wonderful manner; her mineral resources are great, and the future of wealth lies in the hands of men who will guide her plow, care for her live stock, economically use her forests, drive her machinery, harness up her water powers and manufacture her iron and other products. The men who can do this *best* will be those who will qualify themselves for the work by a course in the Agricultural and Mechanical College.

There can be no rivalry between this College and other institutions of learning for the colored race in North Carolina. The paths to be pursued lead in different directions.

The Agricultural and Mechanical College for the Colored Race, is unsectarian, and is under the control of no particular denomination. Religious and moral training will receive the closest attention, and students will be required to attend churches of which they are members.

Ministers of all denominations are invited to interest themselves in the religious welfare of the College.

The College, broad in its purpose, practical in its work, elevating in its influences, is intended to assist and strengthen the colored people in *all* their efforts for industrial and intellectual advancement. As such, its peculiar mission must commend it to the intelligent colored men and women of the State, from whom the Trustees and Faculty confidently expect such sympathy and support as will enable them to make the College of inestimable value to the people for whom it was instituted, as well as to the government by which it is fostered.

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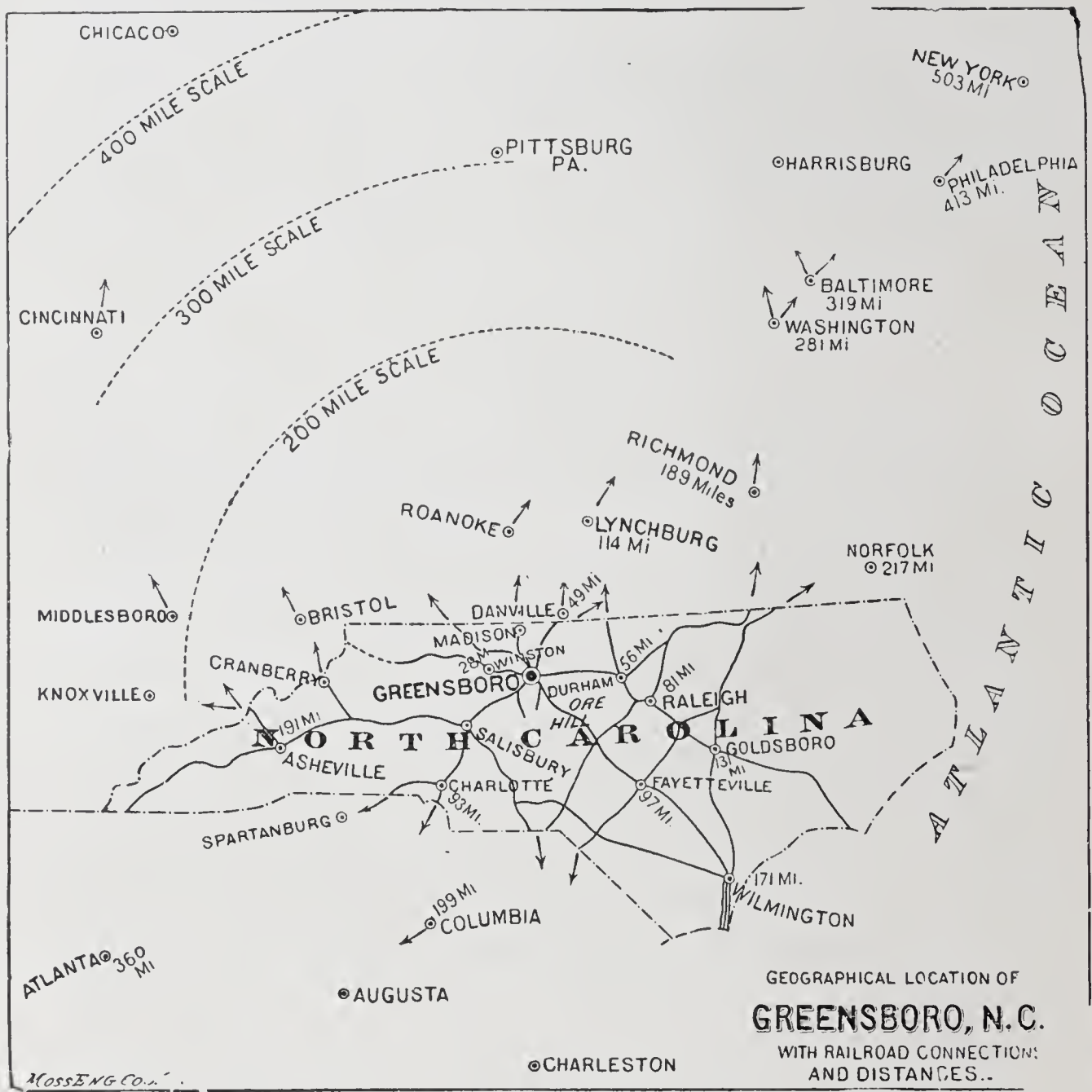
#### Location.

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It is most fortunate for the colored people that their Agricultural and Mechanical College was located in the prosperous and growing city of Greensboro. Its unsurpassed railroad facilities place it in rapid and direct communication with nearly all sections and make it the most accessible town in the State. From almost every section of the State Greensboro can be reached without change of cars. With the North Carolina Railroad, the Northwestern North Carolina Railroad, the main line of the Southern Railway, and the Atlantic and Yadkin Railway, Greensboro is a railroad centre, with forty daily train arrivals and departures, which add greatly to the comfort and convenience of students and the traveling public generally.

Possibly nowhere in the State do as kindly inter-racial feelings exist and as friendly an attitude on the part of the white citizens toward Negro education obtain as among the liberal-minded people of Greensboro. On every hand local sentiment is found to be kind, encouraging and responsive. Parents, educators and public men generally can possibly more confidently appreciate the friendly and liberal feeling prevailing in Greensboro by reverting to





the significant fact that when the question of subscribing \$8,000 for the location of this institution in Greensboro was submitted to its citizens, but one man voted in opposition thereto.

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### **Admission.**

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The requirements for admission into the Agricultural and Mechanical College, which is the complement of the public schools of the State for the colored people, have been regulated by the average scholarship of the advanced students of these schools.

Applicants must be in good health and not under 16 years of age; must understand fairly well the forms and rules of the English language; must be familiar with arithmetic, and have a knowledge of geography and history.

Students who have completed the eighth grade in the grammar schools will be admitted without examination.

A student otherwise qualified may be allowed to elect certain studies from the regular courses already provided in the College if no inconvenience result to the regular classes.

Each student desiring admission should present a recommendation from the school last attended.

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### **Tuition.**

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Tuition is one dollar per month, payable in advance.

A limited number of students from each county will be allowed free tuition. For further information on this subject, address the President.

## Expenses

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Although it is the aim of the College to furnish as much employment as possible to assist students in defraying expenses, no promise or guarantee can be made in advance to furnish such work.

Positively no student will be allowed to enter any department of the College without paying in cash the first month's expenses, as stated below.

No student should expect to enter any department of the College unless he has at least one-half the total amount necessary to defray his expenses during the time of his attendance.

### MONTHLY PAYMENTS.

Tuition, per month.....	\$1.00
Lodging—use of room, bedding, etc., per month....	1.00
Board, per month.....	5.00

### SPECIAL PAYMENTS.

Incidental Deposit .....	\$1.00
Laboratory Fee, per term.....	.25
Workshop Fee, per term, (see Mechanical Department).	
Dining Hall Fee, per year .....	1.00

*These charges are payable strictly in advance.*

Any student not paying the charges exacted by the College will be excluded from all classes until settlement is made.

Students at the time of the advance payments will be given tickets, which will admit them to class-rooms, workshops and dining-hall.

In addition to the above expenses the cost of text-books must be considered. This will amount to about \$10 per year.

Free tuition or county students will pay \$1.00 per month less than the above.

Students who are absent for less than two weeks will not be allowed a reduction of charges.

Board, lodging, tuition, and incidental fees must be



paid to the Treasurer before the rooms are assigned and tickets of admission to class-rooms, work-shops and dining-hall are issued.

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### **Supplies.**

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Each student must bring a hairbrush and comb, a change of sheets and pillowcases and counterpanes, plainly marked.

All students must furnish books, stationery, drawing pencils, thumb tacks and medicines.

Each student must keep on deposit \$1.00 to cover any charges which may be made against him for damage done.

From the standpoint of neatness and economy in dress, each student should supply himself with a regulation uniform as soon as convenient. These uniforms, including cap, which are of a very neat design, can be purchased through the college for \$12.50.

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### **Rules Governing Classification.**

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1. Regular students must take a minimum of fifteen hours of credit work per term; at least three of which shall be industrial or manual training work.

II. Examinations for the removal of conditions will be held on the 1st and 2d of September, and at no other time than the regular term examination periods.

III. Students making an average of 70 per cent. or more will be passed; over 85 per cent., passed honorably. Students will not be promoted from one class to a higher class who have more than two conditions in any preceding class.

IV. Student candidates for graduation will be required to pass a satisfactory examination in all the subjects in their respective courses.

V. Any student failing to secure 50 per cent. of the total marks obtainable during any term, will sever his

connection with the College and be allowed to return the following session.

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### **Graduation.**

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Students graduating from the Trade School Course are entitled to Certificates.

Students are entitled to a Diploma of the College upon the completion of the prescribed course.

Candidates for graduation from the College, in addition to the work outlined in the Catalogue, must have practical experience in field work, either at the College or elsewhere, as shall appear in reports from responsible persons.

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### **Degrees.**

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Students graduating from the Agricultural Course shall be entitled to the degree of Bachelor of Agriculture.

Students graduating from trade course, on completion of all the science courses of the College, shall be entitled to the degree of Bachelor of Science.

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### **General Information.**

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Students desiring assistance in defraying expenses, as far as possible, will be allowed to work at the rate of 5 cents per hour, for which they can get credit each month at the time of their advance payment.

Students who have shown themselves exceptionally efficient, willing and trustworthy workers may, at the discretion of the head of department, receive a maximum rate of 12½ cents per hour. Students receiving aid by labor which they may secure at the College are requested to observe: (a) That credit on school expenses and not money, will be allowed for student labor, except when such exceed his school expense; (b) that credit for stu-

dent labor will be allowed only on account of board, lodging and tuition; (c) that credit cannot be transferred from one student to another.

The Department of Industries operated by the school affords opportunity for needy but industrious students to help themselves. It is impossible to state definitely and in advance how much a student, and especially a new one, would earn per month. This largely depends upon his individual application and energy. All can earn something each month, while the most industrious and energetic student will regularly earn more than his expenses.

Students, upon their arrival in Greensboro, must report immediately to the President for a permit for examination and registration.

Each student upon applying for admission, will be required to sign a pledge, binding obedience to the rules of the College. Parents and guardians are particularly requested to examine our Rules and Regulations, to be found on another page of this Catalogue.

It will be the purpose of the College to maintain a high moral tone and to develop a broad, tolerant religious spirit among the students. In this connection there is a well-organized Y. M. C. A., which meets twice a week for song and praise. A special service will be conducted in the chapel each Sunday by pastors representing the different denominations of the city. All religious services will be free from sectarianism.

There are two flourishing literary societies, which greatly stimulate the development of character and the training of the intellect. These offer facilities for practice in debate, oratory, declamation and essay writing; the members become practically familiar with parliamentary law and usage. While the Faculty, by presence and advice, will seek to encourage these societies, membership will be optional. The Faculty will also encourage the organization of technical societies, in which special objects in connection with agriculture, mechanics and chemistry,



will be considered in a manner conducive to independent thought and research.

Students whose parents or guardians do not live in Greensboro or its immediate vicinity, will be required to room and board in the College—except when the consent of the Faculty has been secured by the written request of the parent or guardian. Consent will only be given, however, when the judgment of the Faculty directs that it can be done, with safety, as the College cannot, nor does it desire to, wholly rid itself of the responsibility out of school hours of the conduct of students who do not room and board in the College.

This industrial part of each course of instruction applies to all students, *and none will be excused therefrom.*

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### Library and Reading Room.

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A large and convenient room on the second floor in the main building has been arranged for a Library and Reading Room. The books have been purchased with great care and new ones are being added from time to time.

Col. T. B. Keogh, a former member of the Board of Trustees, made a valuable donation of books to the Library.

Reading rooms are also provided in the Agricultural and Mechanical buildings, where technical journals and books are kept for the convenience of students in these departments.

The Reading Room and Library tables are supplied with some of the best periodicals and the leading newspapers of the State. The students of the College are allowed to borrow books, periodicals and papers under necessary limitations. The Library and Reading Room is open every week day from 9 a. m. to 1 p. m., and from 3 to 6 p. m.

### **Industrial Museum.**

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An Industrial Museum has been started and already valuable material has been collected. A number of donations have been made by several firms. We are especially indebted to the Standard Oil Company, of Chicago, Ill., for important samples illustrating the manufacture of gasoline, petroleum and lubricating oils of all grades; also to the German Kali Works for typical potash salts from the famous Stassfurt mines in Germany. The American Enameled Brick and Tile Company have also sent us a number of fine specimens of tile, brick and terra cotta goods. Specimens of students' work have been contributed by the various departments each month.

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### **Rules and Regulations.**

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1. The signal for rising will be given at 5:45 a. m. Dressing and arranging rooms, 5:45 to 6:30 a. m. Breakfast 7:00 to 7:30 a. m. Morning session, 8:30 to 12:30 p. m. Chapel 12:30 to 1 p. m. Dinner from 1:00 to 2:00. Afternoon session, 2 to 5 p. m. Recreation, 5 to 6 p. m. Supper 6 to 6:30 p. m. Study, 6:30 to 9:30 p. m. Retiring signal, 9:45 p. m. Lights out, 10:00 p. m.

2. Strict attention must be given to cleanliness and deportment. Each student is required to keep his room in good order and subject to inspection at any time, and to conduct himself at all times in a gentlemanly manner. To attain and maintain a high moral standard is one of the prime objects of this institution, and any student known to have vicious habits or to indulge in vulgar language will be deemed an unfit associate and will be expelled from the College. Mendacity or dishonesty in any form will not be tolerated. Students guilty of such offences will be promptly dismissed.

3. Students shall promptly attend prayers and chapel services and all specific recreations, class and instruction work. Tardiness, or absence from these duties, will, when

not excused, subject a student to demerits. Loitering within the main building by the students is prohibited.

4. Students who interrupt the quiet and order of College life by noises in or near the buildings, or who commit intentional damage to College property, or who make nuisance by throwing slops near the buildings or otherwise, will not be allowed to room on the grounds.

5. Students who persistently absent themselves from chapel and class work, or who persistently neglect College duties, or who engage in drinking, card playing and other vices, or who absent themselves from College grounds contrary to Rules and Regulations, are not regarded as desirable companions for industrious and meritorious students, and will not be allowed to continue as students in the College.

6. Students must attend some church on Sunday morning. Parents or guardians should designate to the President of the College what church they wish their children or wards to attend.

7. No student will be allowed to have upon his person, in his room or in the College buildings, or upon or in the neighborhood of the College grounds, any deadly weapon. A student in whose possession such a weapon is found will be expelled from the College.

8. The use of tobacco, spirituous, malt or vinous liquors in any form by the students is prohibited on, or in the neighborhood of, the College grounds, or in the buildings. Students are forbidden to enter any disreputable house, including places where intoxicants are sold, while absent from the College grounds.

9. Students are forbidden to go upon the roofs of buildings, or to enter or depart from buildings through windows, and they are also forbidden to enter the kitchen, store-rooms or pantry. Students are prohibited from entering the dining-room, except at meal time.

10. Strict discipline will be enforced in the dining-room during meals. Students guilty of ill-mannered conduct in



act or speech will be removed from the dining-room and punished for insubordination.

11. Students are forbidden to receive visitors in the dormitory building.

12. At all times the students shall deport and express themselves respectfully toward the Faculty and every member of it and also toward their fellow students. Any deficiency in this particular will be punished. A student failing to respond to any reasonable demands made by any member of the Faculty shall be held guilty of contempt of authority and punished accordingly.

13. No student will be retained after he has received one hundred demerits in one year.

14. Any student receiving an aggregate of thirty-three demerits during the Fall term; thirty-four demerits during the Winter term, or thirty-three demerits during the Spring term, will be dismissed from the College.

15. A student cannot remain in good standing in any department when dismissed from another.

16. No diplomas shall be given to any student who is in debt to the College.

17. Any student found guilty of any species of dishonesty shall be dismissed or expelled, at the discretion of the Faculty.

18. Any student absenting himself from class one-third of the time during any month, without excuse, shall be dismissed.

By order of

THE BOARD OF TRUSTEES.



### Religious Culture.

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While the College is not a denominational institution, proper attention is given to the cultivation of a broad, liberal Christian spirit. Short devotional exercises are held each evening, which are attended by the boarding students. At 12:30 each school day short devotional exercises are attended by all students. In the direction of religious culture, in addition to these very brief meetings and the fuller meetings of the Y. M. C. A., and the A. & M. College Sunday School, during the past session we have enjoyed a splendid series of instructive and spiritual sermons, for which we are indebted to the following named reverend gentlemen:

Rev. S. S. Sevier, Congregational Church, Greensboro.

Rev. S. J. W. Spurgeon, A. M. E. Z. Church, Greensboro.

Rev. S. B. Turrentine, Methodist Episcopal Church, Greensboro.

Rev. M. L. Harvey, B. D., Providence Church, Greensboro, N. C.

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### Outline of Course of Study.

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#### FIRST YEAR CLASS—FALL TERM.

A. M.—Arithmetic, 5; English, 5; Carpentry and Joinery, 5; Drawing, 5. P. M.—Agriculture, 5; Commercial Geography, 5.

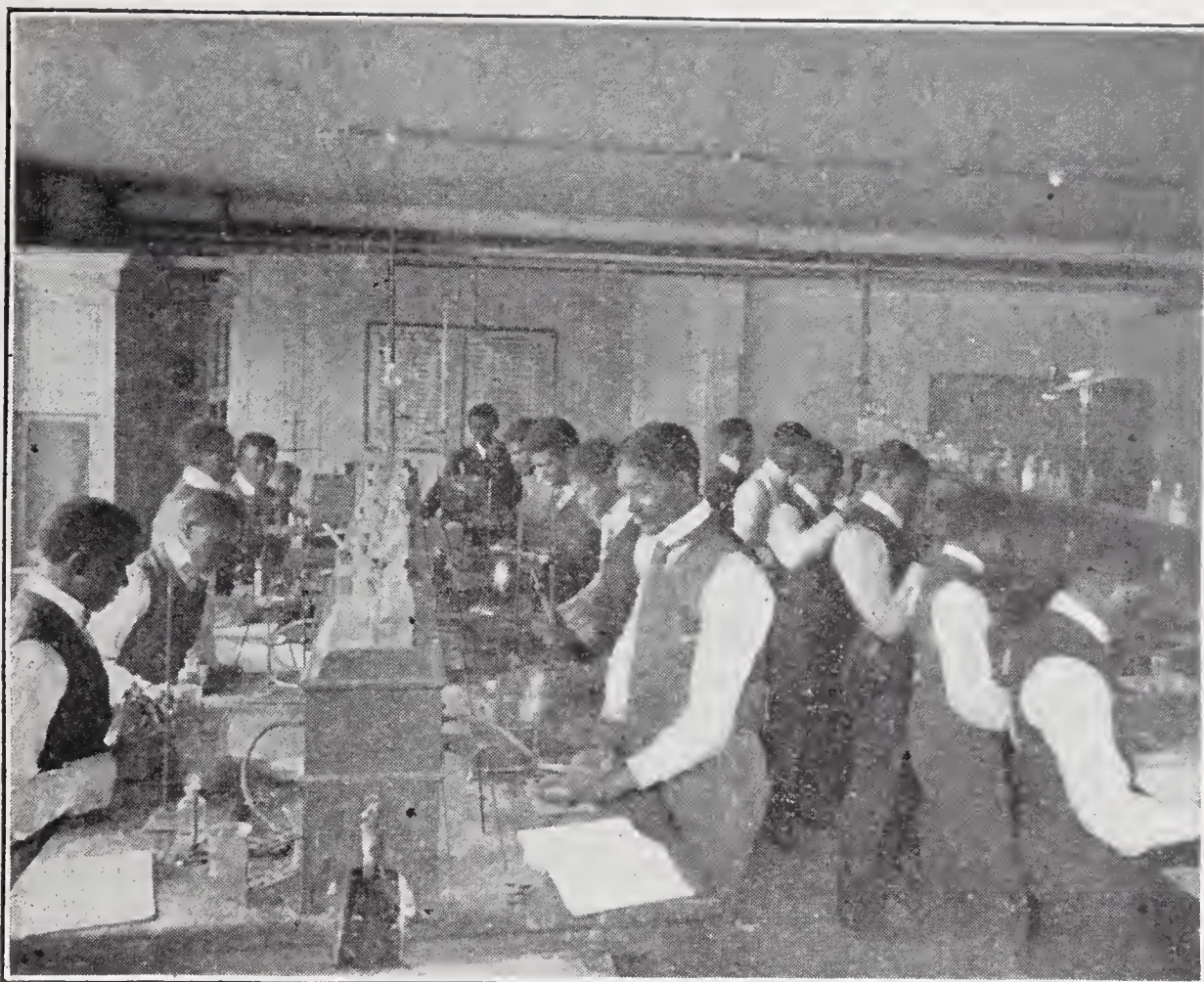
#### WINTER TERM.

A. M.—Arithmetic, 5; English, 5; Carpentry and Joinery, 5; Drawing, 5. P. M.—Agriculture, 3; Chemistry, 2; Commercial Geography, 5.

#### SPRING TERM.

A. M.—Arithmetic, 5; English, 5; Carpentry and Joinery, 5; Drawing, 5. P. M.—Physiology, 5; Materials of Construction, 5.





CLASS IN GENERAL CHEMISTRY.



SOIL AND FODDER ANALYSIS.





## SECOND YEAR CLASS—FALL TERM.

A. M.—Arithmetic, 5; English, 5; Physics, 5; Physiology, 5. P. M.—Drawing, 2; Shop, 3.

## WINTER TERM.

A. M.—Arithmetic, 5; English, 5; Physics, 5; Dairying, 5; Bookkeeping, 2. P. M.—Drawing, 2; Shop, 3.

## SPRING TERM.

A. M.—Algebra, 5; English and History, 5; Chemistry, 5; Dairying, 2; Market Gardening, 3. P. M.—Drawing, 2; Shop, 3.

## THIRD YEAR CLASS—FALL TERM.

A. M.—Algebra, 5; Chemistry, 5; English and History, 5; Butter-making, 2; Bacteriology, 3. P. M.—Drawing, House Planning, 3; Shop, 3.

## WINTER TERM.

A. M.—Algebra, 5; English, 5; Veterinary Science, 5; Chemistry, 2; Agricultural Bacteriology, 5. P. M.—Drawing, House Construction, 3; Heating and Ventilating, 2; Shop, 3.

## SPRING TERM.

A. M.—Geometry, 5; English, 3; Chemistry, 2; Physical Geography, 5; Veterinary Science, 5. P. M.—Drawing, Estimates and Contracts, 3; Heating and Ventilation, 2; Shop, 3.

## FOURTH YEAR CLASS—FALL TERM.

A. M.—Geometry, 5; Chemistry, 5; Drawing, 5; Shop, 5. P. M.—Breeding, 5; Political Economy, 5; Entomology, 5.

## WINTER TERM.

A. M.—Geometry, 5; Feeds and Feeding, 5; Drawing, 3; Mechanism, 2; Shop, 5. P. M.—Breeding, 5; Chemical Laboratory, 5.

## SPRING TERM.

A. M.—Trigonometry and Surveying, 5; Plant Diseases, 2; Drawing, 3; Shop, 2; English, 3. P. M.—Agricultural Physics, 3; Botany, 2.



**Department of Agriculture and Chemistry.**

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J. H. BLUFORD, *Head of Department.*

P. E. ROBINSON, *Assistant.*

W. F. ROBINSON, *Florist.*

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In this department thoroughly practical instruction is given in the various arts and sciences pertaining to agriculture, so as to enable the student to intelligently understand the nature of soils, fertilizers, plant growth, feedings, breeding, farm drainage, methods of cultivation, plant and animal diseases, etc. We aim to train not only the hand and the eye, but we endeavor also to train the mind; in other words, we train the youths to become rational farmers.

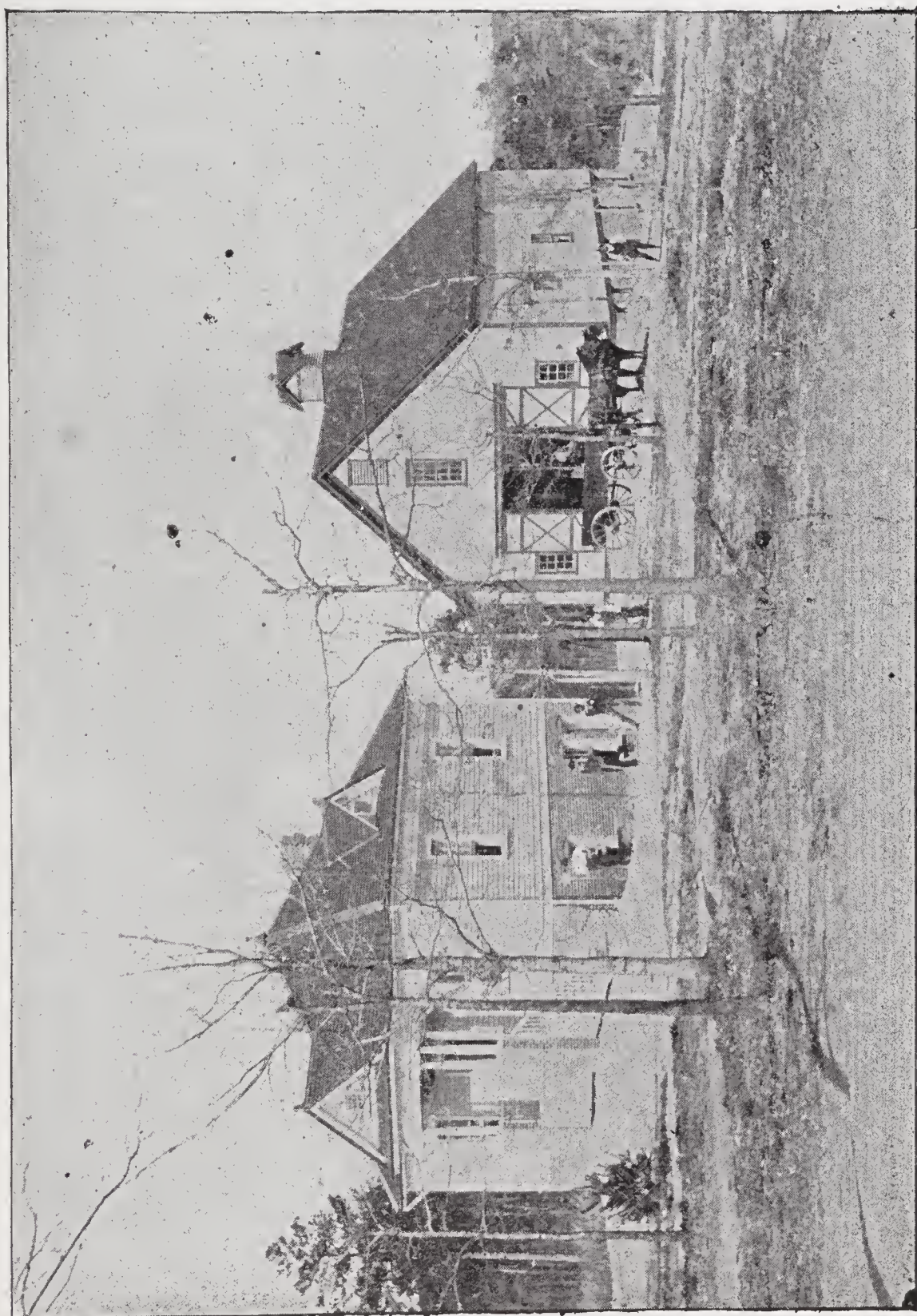
All our class-room work finds its complement either in the field, the garden, the green-house, the orchard, the barn, the dairy, or the chemical laboratory.

**EQUIPMENT.**

Recognizing the importance of good farm machinery and labor-saving devices, the College has purchased and received as donations from a number of firms a considerable amount of farm machinery, such as several different kinds of plows, harrows, cultivators, a seed drill with a fertilizer attachment, a corn harvester, and various tools and machines for market gardening.

The dairy is well equipped with modern apparatus for butter making, such as United States Cream Separator, seven Acme Bail Churns, one Davis Swing Churn, seven Lever Butter Workers, one Eclipse Refrigerator, a Boyd Cream Ripening Vat, a Babcock Milk Testing Machine, etc., thus enabling us to offer the very best course in butter making. Presumably apparatus and utensils for cheese making will be added the next session.

A ninety-ton silo has also been erected for which silage is raised every year. A St. Albans Shredder is used for



DAIRY AND BARN.







cutting up the ensilage and a corn harvester is used for cutting the corn in the field.

The farm is stocked with a splendid herd of thirty-five pure bred and grade Jersey cows, which will be increased just as soon as circumstances will allow.

Different crops, such as wheat, oats, cow peas, sugar beets, sorghum, millet, mangel wurzel, potatoes, alfalfa, tobacco, cotton, rape, vetch, clover, and various other forage crops, are grown on the farm, and the student obtains practical experiences in the cultivation of such crops with the latest and best farm machinery.

Experiments are also being carried on, on the farm, illustrating the effect of different methods of cultivation and fertilization on different crops. Variety tests are also made. This experiment work is carried on by the students in the advanced classes.

The green-house is maintained to aid the student in the study of botany and care of flowers. Instruction is also given in the management of a green-house on a commercial scale.

Market gardening is practiced on a small scale for the purpose of giving the student practice in the management of early truck lands.

The chemical laboratory is well equipped with suitable apparatus and necessary chemicals for the study of general as well as agricultural chemistry.

Among the most expensive apparatus may be mentioned Hoffman's apparatus for decomposition and recombination of water, fat extraction apparatus, chemical balances, soil analysis apparatus, hot plates, copper, air and water baths, apparatus for analysis of baking powders, water analysis, etc.

In short, the equipment of the department is first-class in every respect, and in some lines it is perhaps second to that of no other institution in the State.

While the equipment for the work in Physics is not so complete as that in Chemistry, the Department has made and purchased sufficient apparatus to illustrate on the

lecture table the more important laws of Physical Science. The equipment consists of a Lever Air Pump with oxydized brass barrel and accessories, an Atwood's machine, Port Lummere and Stereoptican for projection work, a set of Vacuum and Spectrum Geissler tubes containing residum gases, Ruhmkorff Induction coil, a Hoffman's Graduated Eudiometer, an assortment of batteries and Lyden jars for induction and distribution of electricity, compound microscope, pulleys, balances, pumps, sonometer and a general assortment of lecture table apparatus. The lecture room can be made dark at any time for illustration with the stereoptican or Port Lummere. The lecture table is fitted with water, gas and electricity.

The department has recently purchased some of the latest apparatus for Soil Physics which includes a ball bearing balance, 50 cc. flasks with ground glass stoppers drawn out to an open capillary tube for specific gravity work; brass tubes  $12\frac{1}{2} \times 1\frac{7}{8}$  inches inside measurement for the determination of volume weight, apparent specific gravity and porosity of soils, apparatus to determine the power of loose and compact soils to retain moisture, a set of brass tubes  $16 \times 1\frac{7}{8}$  inches inside measurement to show the rate of percolation of water through soils; a set of galvanized iron cylinders set in water jackets to show the effect of mulches or evaporation of water from soil; and a set of five glass tubes  $30 \times 1\frac{7}{8}$  inches inside measurement for determining the capillary attraction of soils.

The department will add shortly a soil compacting machine and apparatus to show the percolation of air and the behavior of gases toward soil.

A detailed description of the courses offered by this department follows:

## Description of Courses.

### A. Industrial Courses—Practical Horticulture.

#### FALL TERM—MR. W. F. ROBINSON.

*(Two hours practice work in Industrial Courses count one hour's credit.)*

COURSE I.—GREENHOUSE MANAGEMENT. Three credits.

Required course III English. First year students.

Practical work is given in the care and management of greenhouses. Students are required to grow and care for various flowers, such as carnations, roses, hyacinths, free-sias, narcissus, etc., as well as various foliage plants, like ferns and palms.

#### WINTER TERM—MR. W. F. ROBINSON.

COURSE II.—PROPAGATION OF PLANTS. Three credits. Required courses I Industrial and III English. Given alternately with Course III.

Practice is given in making cuttings, in potting, rooting, grafting, budding, etc. Each student is required to make at least 2,000 cuttings from twenty different kinds of plants and to root and pot same. He is also taught how to prepare various fungicides and insecticides, how and when to apply them.

#### SPRING TERM—MR. W. F. ROBINSON.

COURSE III.—GARDENING UNDER GLASS. Two credits. Required courses I Industrial and III English.

Such plants as lettuce, beans, cucumbers, egg plant, tomatoes, etc., are grown under glass, and the student will be required to care for them and become thoroughly familiar with every detail of forcing plants for the winter and very early spring market.

#### SPRING TERM—MR. W. F. ROBINSON.

COURSE IV.—MARKET GARDENING. Two credits. Required courses I Industrial and III English.

Practice is given in transplanting plants from the



green house or cold frames to the field. Attention is also given to raising early vegetables on a commercial scale.

Each student is assigned a plat 10 x 10 feet, which he controls exclusively during the course. He prepares the ground and plants his plant under the direction of the instructor.

#### FALL TERM—MR. P. E. ROBINSON.

COURSE V.—CARE OF LIVE STOCK. Two credits. Required course III English.

The student is required to go into the various barns of the College and obtain practice in feeding cows, horses, hogs, chickens, etc.; to learn various methods of feeding and make records of feeding experiments, to study the milk records and compare same with the various types of dairy cows.

#### WINTER TERM—MR. P. E. ROBINSON.

COURSE VI.—MILK AND CREAM TESTING. Two credits. Required course III English.

The student is taught how to test milk and cream; he is made familiar with the Babcock test for fat; he is also expected to test milk for adulterants, determine its specific gravity, total solids, the amount of water it contains, and is required to make at least two tests of each cow in the College. He also becomes expert in testing cream for acidity according to at least two different methods.

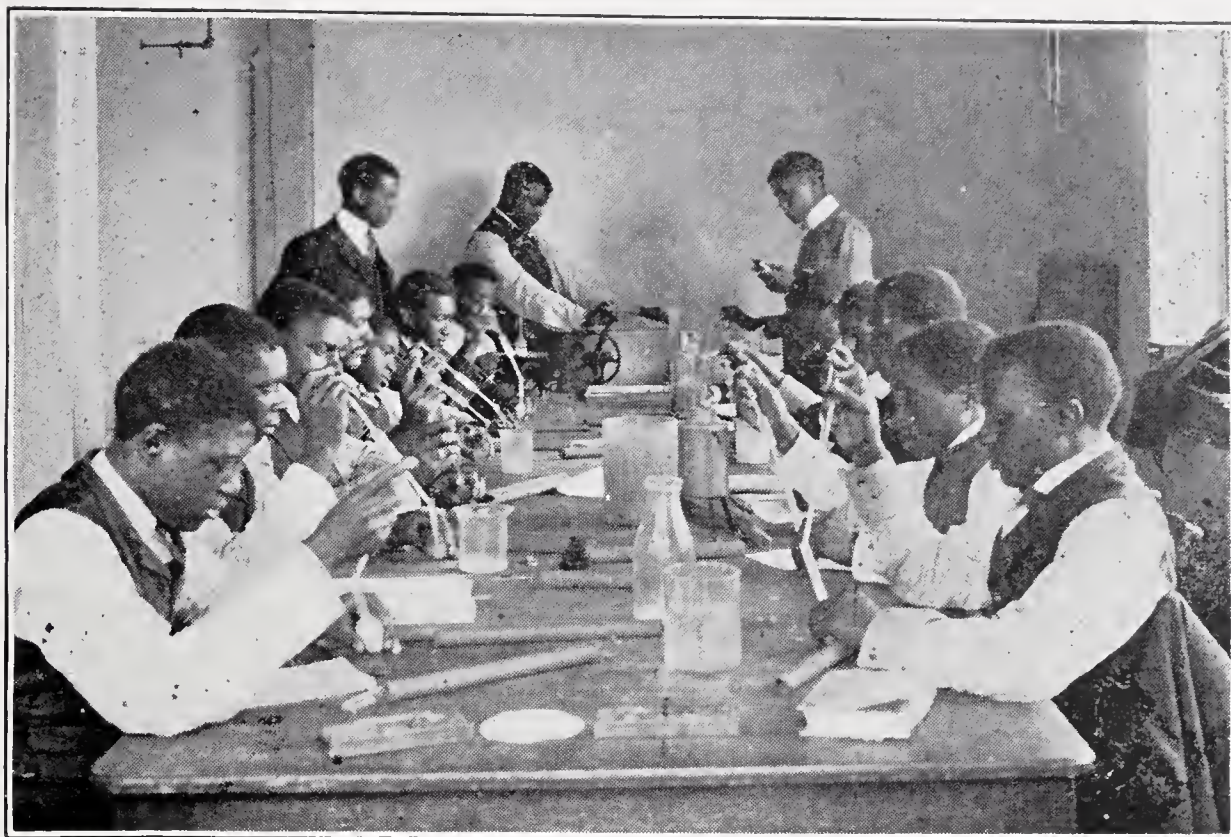
Lectures and recitation work will be given on the composition, secretion and production of milk. Text: *Milk and Its Products.—Wing.*

#### FALL TERM—MR. P. E. ROBINSON.

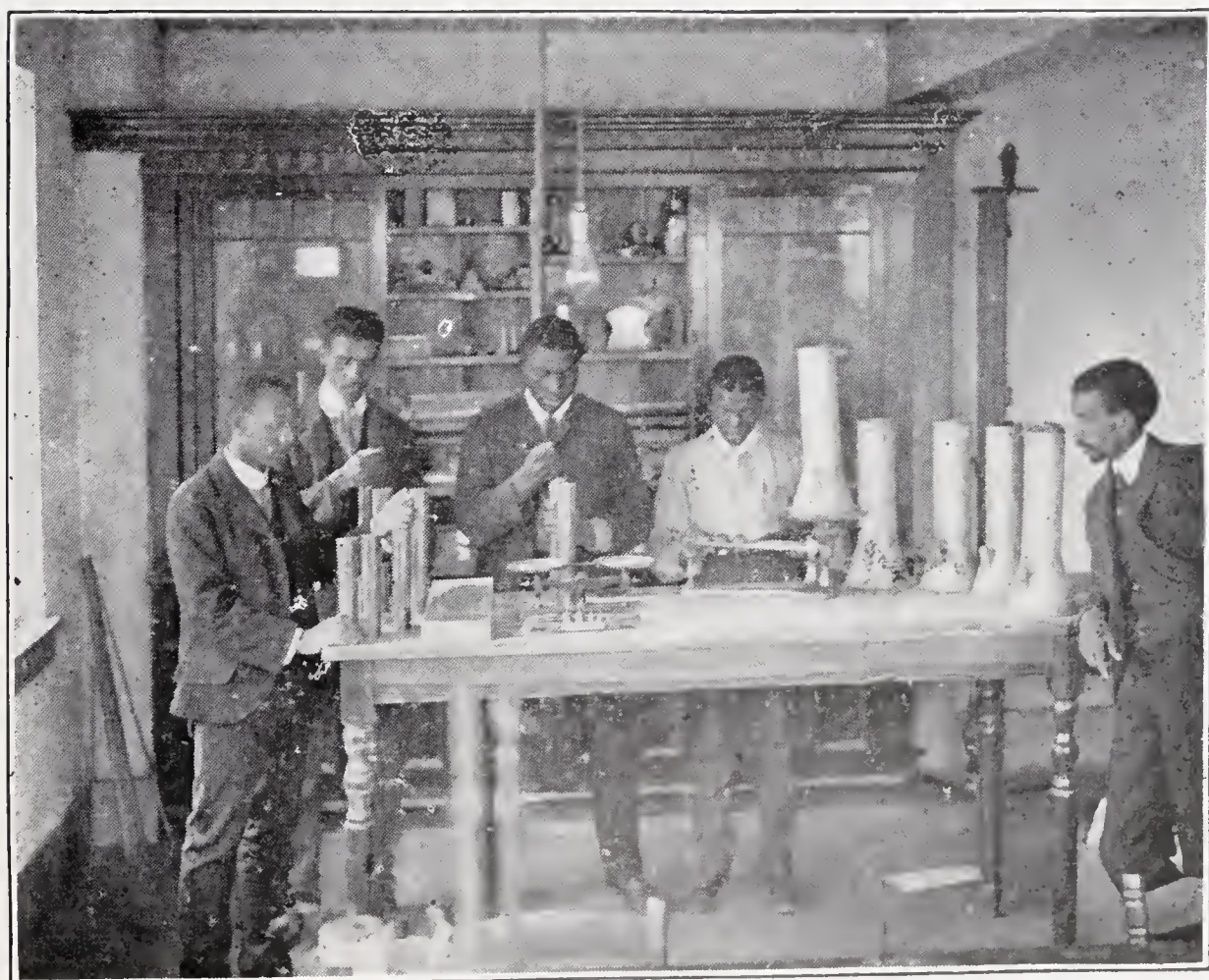
COURSE VII.—BUTTER MAKING. Two credits. Requires courses VI Industrial and III English.

Thorough drill is given in butter-making according to the most improved methods. Considerable drill is also given in making neat and attractive packages, in storing and scoring butter, ripening cream, etc.





MILK TESTING.



CLASS IN SOIL PHYSICS.





### SPRING TERM—MR. P. E. ROBINSON.

COURSE VIII.—MANAGEMENT OF DAIRY. Three credits.  
Required courses VII Industrial and III English, I and II B. C.

The student is expected to go into the dairy and take charge of the work under the supervision of an instructor. He receives instruction in the care and management of separators and obtains more practice in butter-making. He is also expected to keep the dairy accounts and records.

### SPRING TERM—MR. LAR DRETH.

COURSE IX.—MANAGEMENT OF FARM. Three credits. Required courses VIII Industrial and VI English.

Practice is given in directing the work on the College farm under the supervision of the foreman of the farm.

### B. Courses in Agriculture.

### WINTER TERM—PROF. BLUFORD.

COURSE I.—ELEMENTARY PRINCIPLES OF AGRICULTURE.  
Three credits. Open to all. Daily.

This term's work is designed to give the student a sort of a bird's eye view of the whole field of agriculture in an elementary way. It will be freely illustrated by experiment in the laboratory. Text: "Elementary Principles of Agriculture."—*Burkett, Stevens and Hill*.

### FALL TERM—PROF. BLUFORD.

COURSE II.—PHYSIOLOGY. Three credits. Open to all.

In addition to reiteration work, the student is required to cut up one or more animals and study the various organs in detail. Text: Foster's Ele. of Physiology.

SPRING TERM—PROF. BLUFORD.

COURSE III.—PHYSICAL GEOGRAPHY. Five credits. Open to all.

The course is illustrated by means of lantern slides and experiments. Text: Tarr's Physical Geography.

FALL TERM—MR. P. E. ROBINSON.

COURSE IV.—BREEDING. Two credits. Required courses III English and II Agriculture.

Such subjects as atavism, variation, selection, heredity, line breeding in and inbreeding are discussed. Collateral reading required. Text: Breeding.—Shaw.

FALL TERM—PROF. BLUFORD.

COURSE V.—BACTERIOLOGY. Three credits. Required courses II Horticulture and I Chemistry.

Lectures are given on the nature of bacteria, their relation to other plants, supplemented by laboratory work.

WINTER TERM—PROF. BLUFORD.

COURSE VI.—AGRICULTURAL BACTERIOLOGY. Five credits. Required course VI Agriculture.

The relation of bacteria to the soil and the manure heap, to the ripening of cream and cheese, to various diseases, etc., is thoroughly discussed. Text: Agricultural Bacteriology.—*Conn.*

SPRING TERM—MR. P. E. ROBINSON.

COURSE VII.—ENTOMOLOGY. Three credits. Required courses II Horticulture and VI English.

The subject is taught by means of lectures and the student is required to read up on topics assigned him by the instructor. The most common insects and insecticides are studied.

SPRING TERM—MR. P. E. ROBINSON.

COURSE VIII.—FORAGE CROPS. Three credits. Required Course VI English.

Lectures are given on the adaptability of the various crops that can be successfully and profitably grown in North Carolina to special soils, methods and seeding;

preparation of seed bed and pasturing are also discussed. Collateral reading required.

#### SPRING TERM—PROF. BLUFORD.

COURSE IX.—PLANT DISEASES. Three credits. Required course VII Agriculture.

Lectures and laboratory work. Common diseases, such as the cereal pests and insects; diseases of cotton, tobacco and fruit trees are studied with the aid of the compound microscope.

#### WINTER TERM—PROF. BLUFORD.

COURSE X.—FEEDING. Five credits. Required courses III Agriculture and V and VI Chemistry.

The laws of nutrition and the composition of animal bodies are briefly discussed. The composition and digestibility, market and food value of the various food stuffs are discussed. Nutritive ratios and the practical application of same in compounding rations for the various farm animals are carefully considered. Collateral reading required. Text: Feeding of Animals.—*Jordan*.

#### FALL TERM—MR. P. E. ROBINSON.

COURSE XI.—VETERINARY SCIENCE. Three credits. Required course XI Agriculture.

The common diseases of farm animals are briefly discussed, together with remedies for same. Some practical work in caring for sick animals is also provided with the student. Text: Veterinary Elements.—*Hopkins*.

#### SPRING TERM—PROF. BLUFORD.

COURSE XII.—METEOROLOGY. Two credits. Required course XII Agriculture.

Movements of the atmosphere, character of wind, cyclones, tornadoes, thunderstorms, and weather forecasting are discussed.



### C. Courses in Physics.

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J. H. BLUFORD, *Instructor.*

COURSE I. Three hours. Course III Mathematics required.

The work of the first term consists of five lectures and recitation per week, the subjects covered being Mechanics, Hydraulics, Hydrostatics and Pneumatics. The lectures are fully illustrated, and the practical applications of principles clearly pointed out. Full notes are required, and also some reference work.

COURSE II.—HEAT, MAGNETISM AND ELECTRICITY. Two hours. Course I Physics desired, Course IV Mathematics.

These subjects are discussed in an elementary way, and the fundamental principles are illustrated.

Practical work is done in wiring for, and hanging electric bells. Special attention is given to the various kinds of galvanic cells, their uses and relative values. The course is made as practical as possible, so that a student on leaving the college can take up the work of a practical electrician.

COURSE III.—SOUND AND LIGHT. Two hours. Course II desired, V Mathematics.

This is a continuation of Courses I and II, and the same methods are adopted. Sound is treated briefly, but light is given a greater proportion of time so as to familiarize the student with the construction and mechanism of the most important optical instruments and the part played by it in animal and vegetable growth.

COURSE IV.—AGRICULTURAL PHYSICS. Five credits. Required courses III Physics and V Chemistry and I Mechanics.

The power of soils to retain moisture, effect of deep and shallow cultivation, methods of constructing farm buildings, ventilation, road making, draft of wagons and plows, etc., are fully discussed. Text: *Agricultural Physics*.—*King*.



STUDYING FLANT STRUCTURE.



INTERIOR VIEW OF FORCING HOUSE.





COURSE V.—PHYSICAL LABORATORY WORK. Three hours.

Courses I, II and III required.

This work is designed to fix the principles learned in the previous lectures firmly in mind by performing the experiments used on the lecture table.

Subjects: Mechanics of Masses, Liquids, Gases, and Heat.

COURSE VI.—AGRICULTURAL PHYSICS LABORATORY WORK.

Two hours. Courses I, II and III required.

This course will accompany Course IV with detailed experiments to show the rate of percolation of water through soils; capillary attraction; effect of different kinds of mulches; determination of specific gravity and specific heat; and the mechanical analysis of soils. The department has been recently equipped with the latest apparatus for soil work.

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#### D. Courses in Horticulture.

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SPRING TERM—PROF. BLUFORD AND MR. W. F. ROBINSON.

COURSE I.—BOTANY. Two credits. Open to all.

The various parts of plants are studied. Lectures will be given twice per week.

FALL TERM—PROF. BLUFORD AND MR. W. F. ROBINSON.

COURSE II.—BOTANY. Five credits. Desired C. I Horticulture.

Such subjects are how the plant takes up food from the soil and the atmosphere. The effect of sunlight, air and moisture on plants are noted. Diseases of plants and remedies for same are discussed in an elementary way. Given in connection in Course I Agriculture. Text: Elementary Botany.—*Bailey*.

WINTER TERM—MR. W. F. ROBINSON.

COURSE III.—PROPOGATION OF PLANTS. Three credits.

Methods of propagating plants by cutting, stalons,

suckers, layering seeds, etc., are discussed. The principles underlying budding, grafting and pruning are also discussed. Text: Principles of Plant Culture.—*Geff.*

WINTER TERM—MR. P. E. ROBINSON.

COURSE IV.—SMALL FRUIT CULTURE. Two credits. Required courses III Horticulture and III English.

Methods of propagating and cultivating various kinds of small fruit are discussed, together with the proportion of soil for same.

SPRING TERM—MR. W. F. ROBINSON.

COURSE V.—MARKET GARDENING. Three credits. Required course IV Horticulture.

A study of the different crops adapted to market gardening and adapted to North Carolina is made. Construction and management of hot beds, cold frames, special fertilizers for vegetable crops, packing, shipping and marketing are also considered. Text: Vegetable Gardening.—*Bailey.*

SPRING TERM—MR. P. E. ROBINSON.

COURSE VI.—POMOLOGY. Two credits. Required courses IV Horticulture and VI English.

Planting of fruit trees, tilling and fertilizing fruit lands. Planting and caring for orchard, picking, packing, storing and shipping fruit is discussed. Text: Fruit Growing.—*Bailey.*

WINTER TERM—MR. P. E. ROBINSON.

COURSE VII.—PLANT BREEDING. Two credits. Required course VII Horticulture.

Methods of crops, fertilizing plants, originating new varieties, and how to improve old varieties are discussed.

WINTER TERM—MR. W. F. ROBINSON.

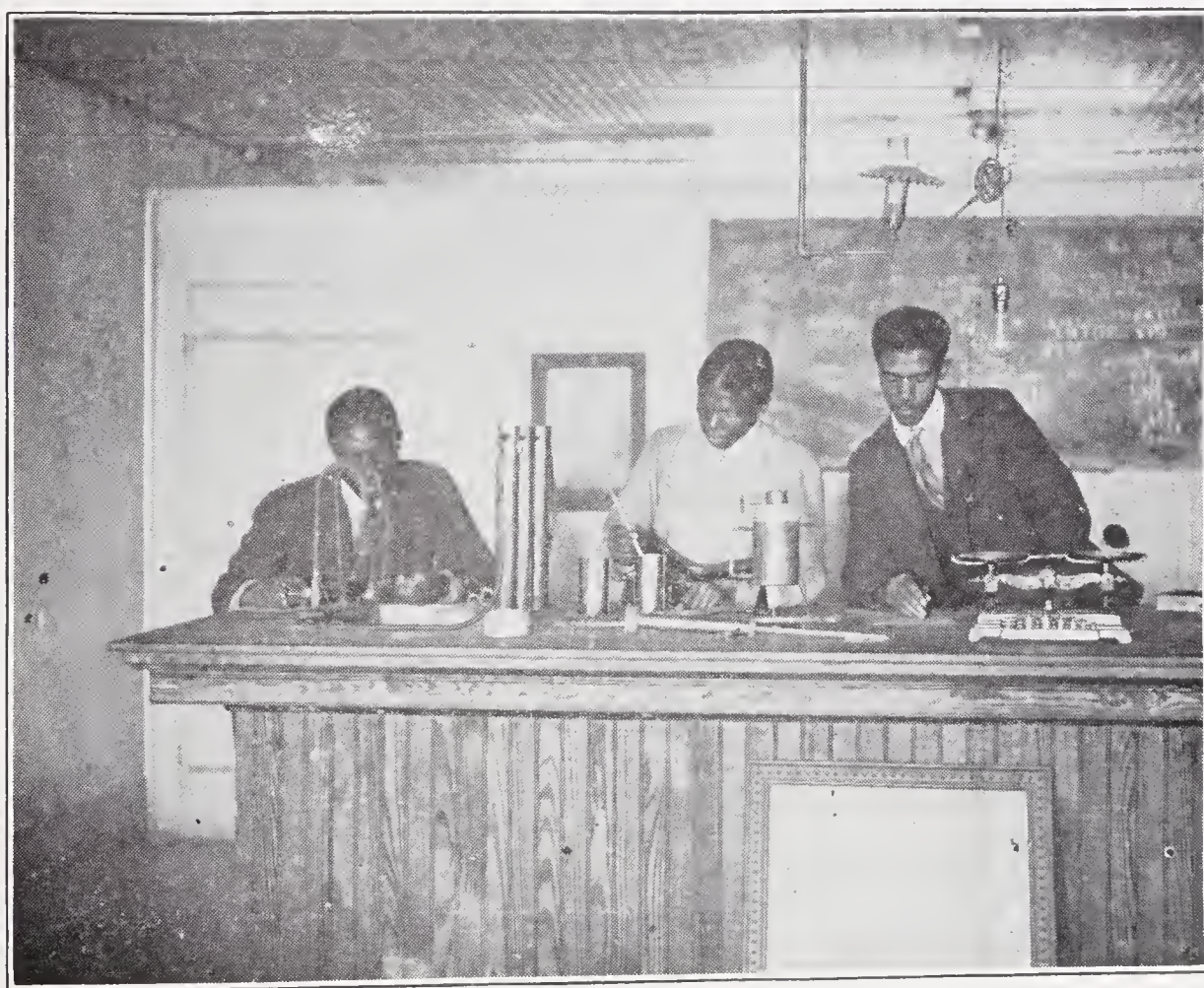
COURSE VIII.—LANDSCAPE GARDENING. Two credits. Required course VI Horticulture.

Principles of embellishing landscapes, planting and management of woodlands, management of forests are discussed. Text: Landscape Gardening.—*Maynard.*





STOCK JUDGING.



STUDYING SPECIFIC HEAT AND RATE OF PERCOLATION OF WATER THROUGH SOIL.





**E. Courses in Chemistry.**

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**WINTER TERM—PROF. BLUFORD.**

COURSE I.—GENERAL CHEMISTRY. Three credits. Required course II Physics.

Lectures are given on general chemistry, and experiments are performed before the students in the lecture room, which bear directly on and pave the way for Agricultural Chemistry.

**SPRING TERM—PROF. BLUFORD.**

COURSE II.—GENERAL CHEMISTRY. Three credits. Required course I Chemistry.

Lectures and laboratory work. The student goes into the laboratory and carries on experiments for himself, illustrating the principles he has learned in the lecture room. Text: Mimographed Notes.

**FALL TERM—PROF. BLUFORD.**

COURSE III.—QUALITATIVE ANALYSIS. Three credits. Required course II Chemistry.

Laboratory work. During this term the student becomes familiar with testing for the metals and especially the fourteen which enter into the composition of plant and animal life.

**WINTER TERM—PROF. BLUFORD.**

COURSE IV.—QUALITATIVE ANALYSIS. Two credits. Required course III Chemistry.

Laboratory work. Qualitative analysis completed, acids. Text: Appleton's Qualitative Analysis.

**SPRING TERM—PROF. BLUFORD.**

COURSE V.—AGRICULTURAL CHEMISTRY. Two credits. Required course IV Chemistry.

Lectures on the chemical composition of soils, plants and animals. The function of the various elements necessary for plant growth, and the various compounds for animal nutrition are discussed.

## FALL TERM—PROF. BLUFORD.

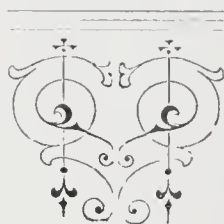
COURSE VI.—QUANTITATIVE ANALYSIS. Five credits. Required course IV Chemistry.

Instruction is given in the analysis of soils, fertilizers and feeding stuffs, the object being to acquaint the student with the chemical composition of soils, fertilizers and feeding stuffs, so that he may intelligently make use of reports and bulletins of experiment stations dealing with the chemical composition of various agricultural products.

## SPRING TERM—PROF. BLUFORD.

COURSE VII.—ANIMAL TOXICOLOGY. Two credits. Required courses I, II, III and IV Chemistry.

Lectures are given on the poisonous plants and insects injurious to stock; the symptoms of poisoning by plants, pigments, insecticides, matches and vermin poison; the sources, elimination, and antidotes of stock poison, etc.







CARPENTRY.



STUDENTS CONSTRUCTING A BUILDING





### Department of Mechanics.

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A. WATSON, *Head of Department.*

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Assistant and Instructor in Shops.

W. N. NELSON,

Instructor in Wood Working and Painting.

WM. YATES,

Instructor in Tinsmithing.

C. N. EVANS,

Instructor in Blacksmithing.

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Instructor in Shoe and Harness Making.

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Engineer and Janitor.

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There are two most valuable possessions which no search warrant can take away, no reverse of fortune destroy. They are what is put into the brain: knowledge; and into the head: skill.

The work in this department is designed to give the student such a combination of knowledge and skill that he may be something more than an ordinary mechanic or an impracticable theorist.

From the beginning of the first year the time is divided between the lecture room, draughting rooms and shops. Students will be given an opportunity of visiting the various manufactories in and around Greensboro, and every lecture and exercise will be illustrated so far as possible, and the practical application pointed out.

It is recognized at the outset that a knowledge of how to make and read drawings is necessary to success in mechanical work, and further that both practical knowledge and mathematical science are necessary in preparing any reliable drawing or interpreting the same. The courses as laid down are designed to make the student familiar with either machine shop practice, or building design construction.



The Trustees and Faculty have decided that the first two years work in this department shall be conducted as a trade school.

The first and second year students will, therefore, select the special line they wish to pursue, and will be required to continue in that special work during the two years. After that time, those who wish to graduate from the institution, will be given an opportunity for instruction in the other shops and will perfect themselves in mathematics, science and drawing.

#### EQUIPMENT.

This department is well equipped for the work in hand and other machinery will be added from time to time as required.

The department building is a substantial modern structure, two stories and basement. On the first floor are the joinery, wood-turning shop, machine shop and model room; in the basement of the rear wing is the smith shop, paint shop, tin shop, wood working machine shop, with stock room, and adjoining this is the boiler and engine rooms.

The lecture room can be made dark at a moment's notice and the sunlight used to illustrate on a permanent screen. Water and power are at hand for use, also gas. A dark room is fitted up for photographic use and for experiments requiring it.

In mechanics, a full collection of materials of construction will be provided, so that students can study them from observation as well as from text. A museum of models in mechanism and construction has been begun and will be added to as required. A reading room is provided in the building, well supplied with books of reference and technical journals. This is open at all times to the students. The equipment in drawing consists of tables, drawing boards and T squares. Students will pro-

vide themselves with instruments, which will be arranged for at lowest rates; also paper, pencils, ink, and entire set of drawing tools may be rented for 75 cents per term if paid in advance.

In free-hand drawing a full set of models with a sufficient number of tables is provided. Alcoves are arranged for teaching shading, and the rooms are well lighted and heated.

The wood-working shop is equipped with twelve double benches, provided with patent vises and stops, twenty-four complete sets of joiners and wood-worker's tools. Each set is arranged in a neat wall case, having a glass door and combination lock. Each student in wood-working has a set of tools and is responsible for them. There is also a large case of tools for the instructor and for general use. The shop is also supplied with a 36-inch band saw, a surface planer, a universal wood-worker, with attachments for sawing, ripping, dadoing, jointing, tenoning and boring, a swing-saw, a pattern maker's lathe, twelve small turning lathes, an emery wheel and grindstone.

The machine shop is equipped with six engine lathes, shaper, drill-press, vises, test plates and a full assortment of band tools.

The forge shop is equipped with twelve patent, down-draft Buffalo forges, each having an anvil, sets of tongs, flatters, fullers, etc., also slack-tub and coal box. The blast for the forges is supplied by a 40-inch fan, placed in the corner of the shop and connected to the main shaft. The smoke is exhausted by the same fan and forced out at the side of the building. There is also one portable hand force for use when the machinery is not running. Two work benches, supplied with vises, stock and dies, taps, files, etc., also a mandrell, sledges, and leather aprons, complete the equipment in this shop.

The power plant consists of a 30-horse-power Root water tube boiler of latest design, and a 35-horse-power Skinner automatic engine of the latest pattern. There are

also two smaller engines for experimental and farm work. The exhaust steam is used for heating when the shops are running. All modern accessories, such as steam feed pump, feed water heater, oil separator, reducing and back-pressure valves, etc., are in constant use.

The Westinghouse Electric & Manufacturing Company, of Pittsburg, has presented us with a sixty-light direct-current dynamo and the same will be installed during the next Fall term; also a complete set of incandescent and arc lights.

The tin shop is fully equipped with machines for doing all kinds of tin work, and this shop supplies the cans for the canning industry carried on by the Department of Agriculture, machines for ornamental work, such as cornices, gutters, finials, etc., will be added as soon as necessary.

Instruction in the following trades has been provided:  
Blacksmithing and general repairing.

Horeshoeing.

Tinsmithing.

Broom-making.

Wood-turning.

Bricklaying and Plastering.

Wheelwrighting.

Painting and decorating.

Machinist work.

Shoe and Harness making.

Heating, plumbing and gas fitting.

Students in this department will begin free-hand and mechanical drawing in the Fall term of the first year. They will be required to make a regular graduated set of models and exercises in the various lines they pursue, from drawings furnished by the department, after which they will design their own work, under the supervision of the instructors in charge. All work will be executed from drawings in order to familiarize the student with the preparation of and reading the same.

The course in mechanical drawing will be varied to suit



the different trades and will be as practical as possible.

Advanced students will be required to do considerable technical reading, under the direction of the professors in charge, and the third and fourth year men will be required to write at least two technical essays during each term. These will be read at the bi-weekly meetings of the students of the department held to hear lectures on technical subjects and to discuss the papers read. A full line of technical journals will be on file for the use of students, and the books in the department library are always accessible for reference.

Students, candidates for graduation in this department will, at least, do thirty hours of shop-work, eighteen of which must be in one line of work.

Students taking wood-work, tin-work, or machine shop-work will be required to take instrumental drawing from the beginning of their course. Other trades require free-hand drawing only.

A special course of two years will be given students taking wood-turning as a trade.

Text-book will be required on all trades in the Mechanical Department, and an examination at the end of each term will be given in the same.

Text-books of all class room work will be purchased by the students.

Students must supply themselves with books and instruments.

Tools to be purchased by students:

*Machine Shop.*—Thread gauge and prick punch, steel scale and scratch all, screw pitch gauge.

*Blacksmith Shop.*—Apron and cap, one foot rule, one calipers.

*Tin Shop.*—Dividers, ruler, scratchall and aprons.

*Carpenter Shop.*—Cap, apron, dividers, jack-knife, pencil and rule.

*Wood Turning.*—Cap, apron, dividers, pencil and rule.

*Bricklaying.*—Overalls, cap, trowels, square and rule.

*Broom and Shoe Shops.*—Aprons, rule, pencil and knife.

### HOUSE PLANNING—FOURTH YEAR.

COURSE I.—MECHANICS OF BUILDING. Two hours. Courses II Mathematics, XII Drawing, III English required. Note-book only.

The first term consists of lectures and drawing exercises in the use of materials. The analysis of strains in girders, beams, columns and rods. The graphic method is used as well as the analytic. Ten plates.

COURSE II.—Two hours. Course II required. Note-book.

Consists of graphic analysis of trusses, arches and walls, and their proper design and construction. The work is made entirely practical and many original problems will be worked out. No text-books required. Twelve plates.

COURSE III.—PLUMBING. Two hours. Courses I Technology, I Physics, III and IX Drawing required. One term.

Consists of lectures and drawing. The various methods of disposals of sewerage and drainage are explained also. The best kinds of sanitary appliances, defective methods and material receive attention, and a course in technical reading is required on this subject in connection with the lectures. Sketches and scale drawings for plumbing plants will be called for as the lectures describe the same. Facilities will be given for inspecting work under construction in the city.

COURSE IV.—HEATING-VENTILATING. Two hours.

This course comprises lectures and drawing exercises in the various methods of heating buildings. Fire-places receive attention first, then stoves and furnaces are discussed. After this the different methods of steam and hot water heating receive attention, and working drawings and details are required. The sizes of flues, boilers, pipes and radiators are determined and comparative estimates made of cost. In connection with this work stu-

dents may take shop courses in steam and water fitting and in tin work adapted to furnaces and stoves.

COURSE V.—CONTRACTS, ESTIMATES AND SUPERVISION WORK. Two hours. Course V required, also II drawing. One term.

This course consists of lectures, exercises and reading. The law of contracts is explained, and the forms of building contracts, plastering wall contracts, sub-contracts, etc., are given in full. Sets of working drawings and specifications are given for estimate, and specification work outlined. The chief points in supervision of work is dwelt upon and the student is advised in the matter of handling men and materials to the best advantage.

COURSE VI.—ARCHITECTURE. Three hours. Course IX drawing. One lecture per week. One hour of reading and three hours of drawing will be required in this course. One term.

The subjects will comprise Egyptian, Greek, Roman, Byzantine, Romanesque, gothic and modern styles. Their history, development and constructive features will be brought out, and the drawing will serve to illustrate and fix the same in the minds of the students. Students desiring to take the lectures only, may do so, receiving one hour credit. Open to third and fourth year students.

COURSE VII.—PHOTOGRAPHY. Two hours.

This work consists of practical amateur work in handling the camera, developing, dry plates, blue printing and silver printing, and mounting of prints. Practice in lantern slide-work is also given, and practical work in enlarging or reducing for this purpose, is required. This course is not intended to produce photographers, but as an adjunct in mechanical work. Open to Seniors only, except by special permission.

COURSE VIII.—MECHANISM. Three hours. Courses VIII and XI Mathematics, required.

The work consists of recitations and drawing exercises, illustrating the various principles of mechanism. This



work paves the way to intelligent machine designing, and required of those taking advanced work in machinery.

COURSE IX.—MATERIALS OF CONSTRUCTION. One term.  
Two hours. No previous work required. Note-book only.

Two lectures per week during one term are devoted to a description of the various materials entering into ordinary buildings. Attention is given to methods of their manufacture and preparation, defects and special uses. The subjects include stone, cements, brick, iron, steel, copper, tin, lead, zinc, alloys, wood, glass, paints, hardware and furnishings. The lectures are elementary and are illustrated as far as possible by means of models, specimens, and lantern views.

#### SHOP FEES.

No charge is made for the use of tools or apparatus, but a small fee to cover cost of material is charged, as follows:

Machine Shop .....	50 cents per term.
Blacksmith Shop .....	75 cents per term.
Wood Shop .....	50 cents per term.
Tin Shop .....	50 cents per term.
Tin Shop .....	50 cents per term.
Shoe Shop .....	50 cents per term.

Students are held responsible for tools, instruments and apparatus used.

#### DRAWING—FIRST YEAR.

COURSE I.—FREE-HAND. Two hours. No requirements.  
One term.

Flat copy, including squares, circles, symmetrical figures and conventional forms are taught during first term. Eighteen plates will be required, three of which are original designs by the student.

COURSE II.—FREE-HAND. Two hours. Course I desired, but not required. One term.

Perspective and sketching from models is taught during the first part of this term, and shading of solid forms

afterward. Twenty plates are required for passing.

COURSE III.—FREE-HAND. Two hours. Course II required. One term.

The work of this term consists of sketching from miscellaneous objects, both from nature and mechanics. Special attention is also given to the preparation of free-hand work in drawings. Elevations, perspective, sections and details of machines and parts are required to be made. All work is original, no copies allowed. Eight plates required.

COURSE IV.—INSTRUMENTAL DRAWING.. Three hours.  
Course open to all. One term.

Instruments and text. This work begins with the use of instruments, their care and special attention. The student also studies practical Geometry from text and draws the problems as described. All work is neatly traced in ink and carefully lettered. Fifteen plates required.

COURSE V.—PROJECTION. Two hours. Course IV required.  
One term.

The science of representing objects according to the standard methods of projection is taught in this course. The use and nature of the scale is also given at his time. The work comprises lectures and exercises in regular plan and elevation work, also in isometric projection. Fifteen plates are required, five of which must be original.

COURSE VI.—Two hours. Course V required. One term.

The work of this course will consist of special lessons in connection with the various trade courses. The application of courses IV and V will be made to the needs of the manual training work. Fifteen plates are required, five of which are original.

COURSE VII.—ELEMENTARY CONSTRUCTION. Two hours.  
Courses III and VI required.

This course consists of occasional lectures, with exercises in drawing of various construction details in the several trade courses, especial attention being given to building and machine work. Students are required to

make careful scale drawings of the problems given, and to keep notes of the lectures. Twelve plates will be required for passing.

COURSE VIII.—ELEMENTARY CONSTRUCTION. Two hours.

Course VII required.

Lectures and drawing. Continuation of course VII. Color work, both pencil and brush, will be introduced in this course. Detailing will also be taught. Eighteen plates required.

COURSE IX.—Two hours. Course XI required.

This will consist of advanced design with full working details for same. Practice in taking of quantities and making estimates will be given. Outline specifications will be required in this term.

COURSE X.—Two hours. Mechanics, history of architecture, course XII required.

Advanced architectural designs, including perspective and color drawing, complete sketches, working drawings and specifications are required; also complete estimates and quantities.

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### **Manual Training and Blacksmithing.**

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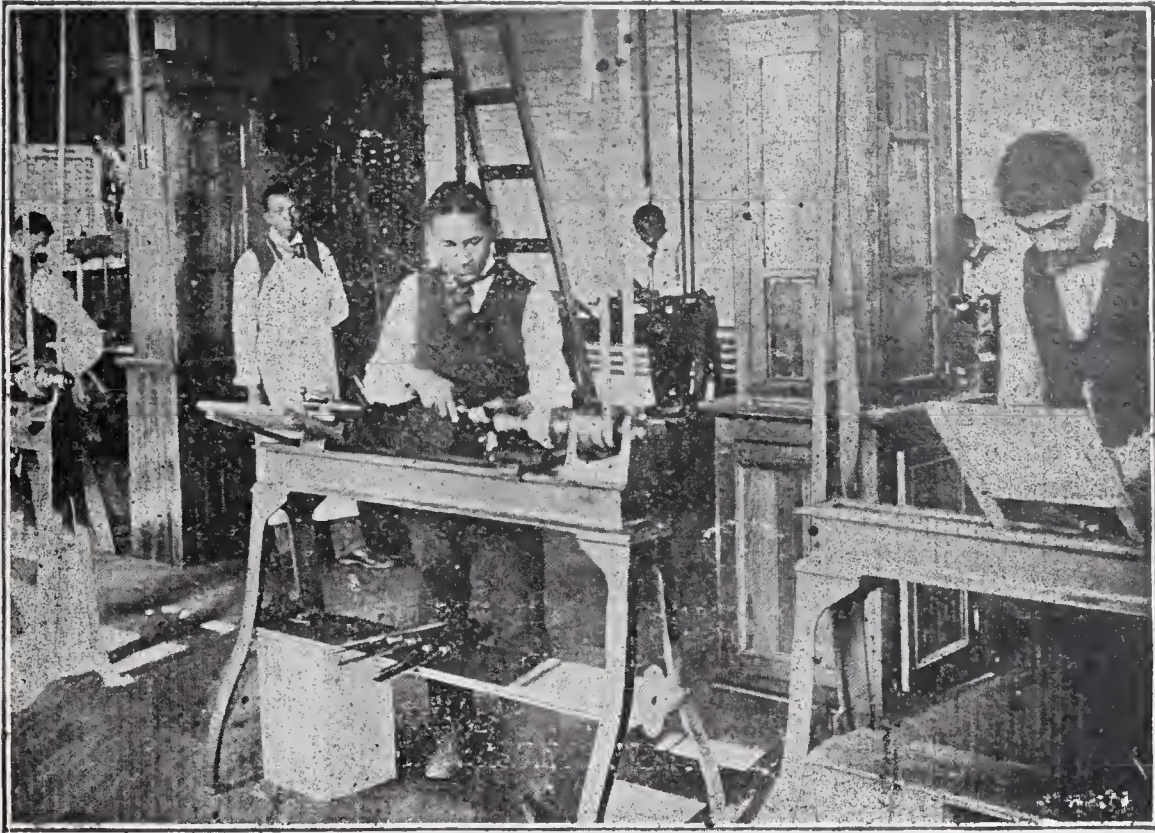
COURSE I.—Three hours. No requirements. Elective.

The work of this course consists of learning the names and uses of tools, building and managing fires, forging and shaping iron. All work is done from drawings, and the student is required to complete at least fifteen models of the prescribed course before credit is allowed.

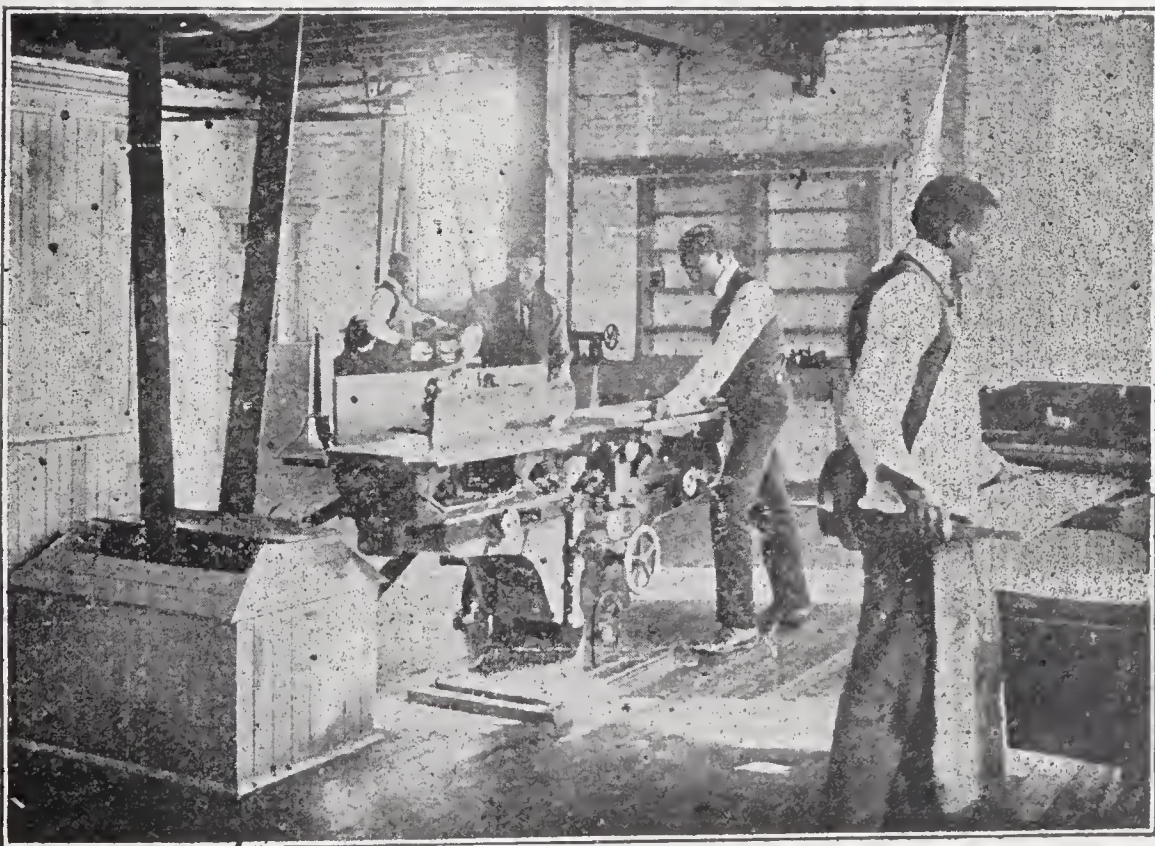
COURSE II.—Three hours. Course I and course II drawing required.

Welding iron is taught during this term, and a full exposition of the art given. The student is required to work from models and drawings, and fifteen exercises must be submitted. Bolt and nut making are also given in this course.





WOOD TURNING.



POWER WOOD SHOP





### COURSE III.—FORGING, WELDING AND TEMPERING STEEL.

Three hours. Course II and course III drawing required.

This work is intended to give the student a knowledge of working steel in various forms. The making of laid in edge tools, tempering springs, hammers, cold-chisels, cutters, drills, etc., is fully illustrated and the student encouraged to make tools for his future work. Students preparing for machine shop work are required to make a full set of lathe tools, cold chisels and hammer for their future machine shop work. Ten models required.

COURSE IV.—HORSESHOEING. Three hours. Course III drawing, course III B. S. required. One term.

The making of shoes for various special uses will be taught during this term, and reasons given for each form. The anatomy of the hoof is also studied, and wrong methods pointed out. The student will also receive instruction in general repairing of farm machinery.

A set number of models will not be required in this year, as students in the last year of their trade work are expected to be sufficiently interested in their work to employ their time to the best advantage.

### Wood-Working.

COURSE I.—JOINERY. Three hours.

Students in this work are required to take courses I and IV in drawing.

The use of the plane, tri-square, gauge saw and chisel are exemplified and the general care of edge tools explained. Fifteen models from drawings required to pass.

COURSE II.—Three hours. Course I, and courses I and IV drawing required.

The brace and bit are introduced in this course, and also the level square; practice in mortising and mitring is given; grinding and setting planes are taught. Fifteen models; ten copies, five original.



COURSE III.—Three hours. Course II, and courses II and V drawing required.

This term is given to practical application of principles learned. Jointing and glueing are taught, and dovetailing; saw-filing and setting also is required of each student. All work to be done from student's designs.

COURSE IV.—Three hours. Courses II and III required.

Wood-turning between two centres is taught in this term. Ten models from copy and ten original models required.

COURSE V.—Three hours. Course IV required.

Wood-turning, face-plate work, turning rosettes, cups, rings, balls, etc. Then models from copy and ten from original designs required.

COURSE VI.—Three hours. Course V required.

General construction work in carpentry or joinery or cabinet work. All work to be made from student's own designs.

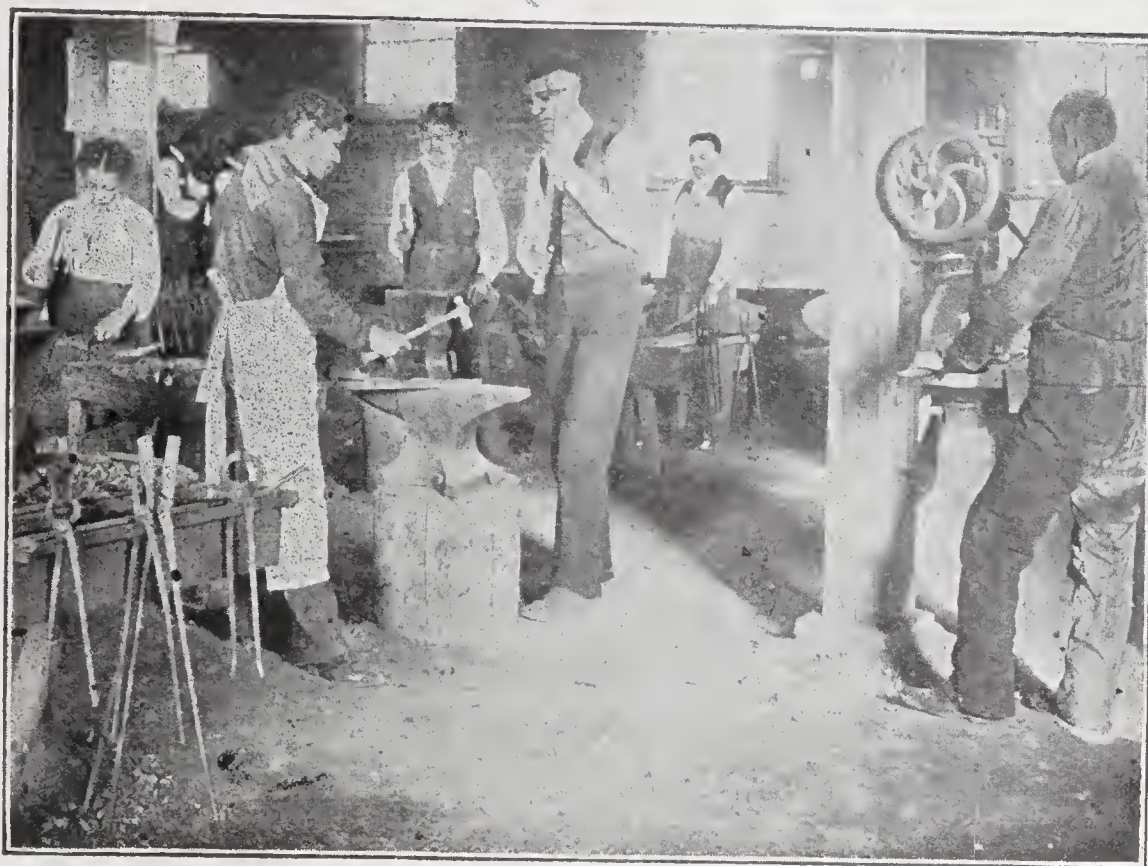
### Machine Shop.

COURSE I.—Two hours. Courses III and VI drawing, III blacksmithing required. First term.

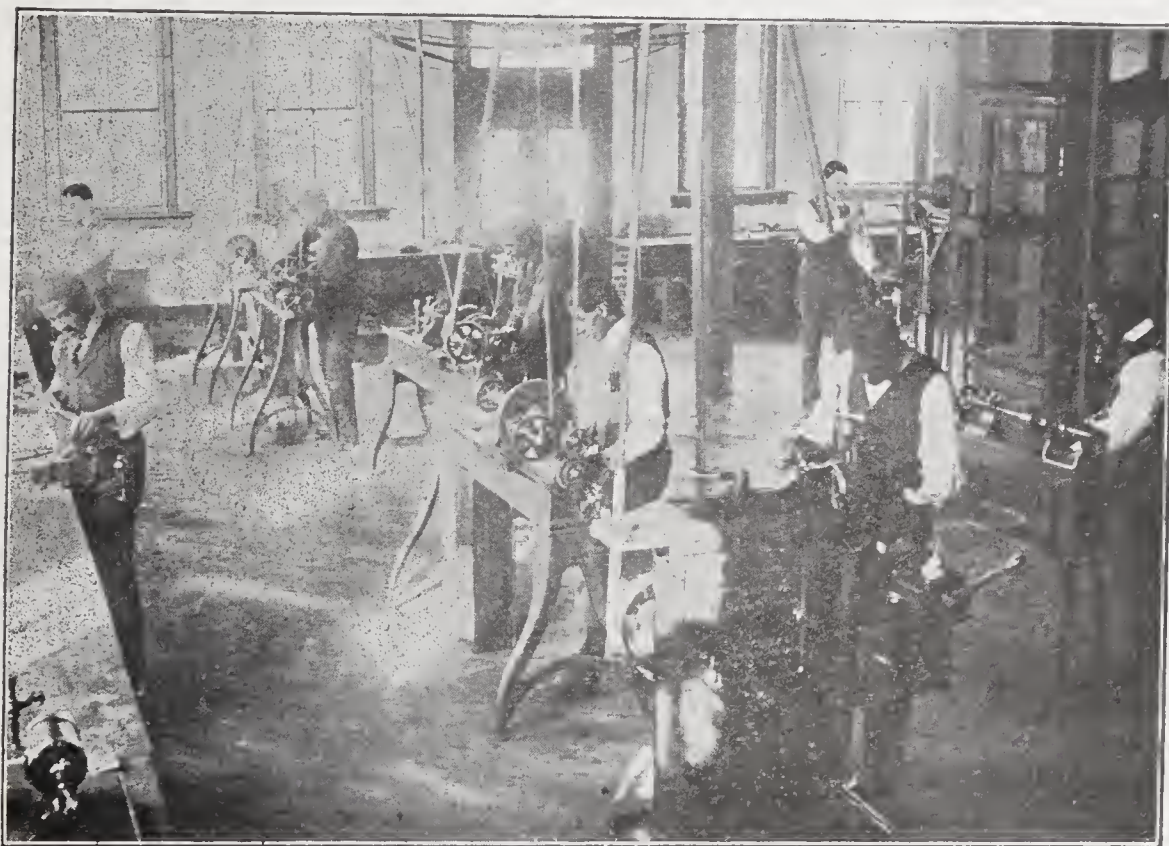
The work of this term will be given mainly to chipping and filing. No time will be spared to fully fix in the mind of the student the value of the tools used in this work and the names of the same. Ten models required to complete the course.

COURSE II.—LATHE WORK. Three hours. Courses I machine work and VII drawing required.

During the time in this course the student will be taught how to centre different shaped objects and the various cuts made by an engine lathe. Some knowledge of how to use the drill and reamer on live and dead centres. Ten models required, including one original piece.



FORGING.



MACHINE WORK.







**COURSE III.—DRILLING MACHINE.** Three hours. Courses II machine work and VIII drawing required.

Laying out work by prickmarks and lines will be given special attention. Drilling of different kinds of material with certain speed will occupy much of the time in this work. Speeds and feeds for different size drills must be carefully studied. Ten models will be required to complete this course.

**COURSE IV.—BLANKS FOR GEARS AND THREAD CUTTING, INTERIOR AND EXTERIOR.** Three hours. Courses III machine work, IX drawing required.

Blanks for gears of various sizes and positions will be cut and faced on the lathe. Addendum line will be found by student. Threading of different kinds of material, both interior and exterior diameters, together with worms and cylinder cams, will constitute the bulk of the work of this course. Ten models required, three of them original.

**COURSE V.—SHAPER WORK.** Three hours. Courses IV machine work, X drawing required.

The work of this course will be original throughout, and no student will be allowed more than four models and not less than two, except in very difficult problems. The work will include gear cutting and the general assembly of parts of complete machines.

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### **Tin Work and Pipe Fitting.**

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\_\_\_\_\_  
Instructor.

**COURSE I.—**Three hours. No requirements.

The work of this course consists of familiarizing the student with the various tools, machines and materials used in the trade, and in cutting and plane soldering. Making cans, cups, etc., from patterns is required of the student for passing.

COURSE II.—Three hours. Course I, and I and IV drawing required.

Continuation of course I, introducing sheet iron work, riveting, bending, guttering, making joints, elbows and Ts from furnished patterns.

COURSE III.—Three hours. Course II required.

Constructing general tinware from student's own patterns. Six models required. Principles of flat and standing seam working also taught.

COURSE IV.—Three hours. Courses III and VI drawing, III tinwork required.

Cornice work, stamping, brazing, working from original designs of student.

COURSE V.—Five hours. Course IV required, and VII drawing.

Pipe-fitting, joining cast iron, wrought iron, brass and lead pipes, use of pipe machine, stocks and dies, cutters, etc., is taught, and reasons given for methods used.

COURSE VI.—Three hours. Course V required.

Furnace work, ornamental tin and sheet metal work, exhibition work.

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### Shoe and Harness Making.

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————— Instructor.

COURSE I.—Three hours. Open to all.

Consists in learning the names of tools used in the trade, also kinds of material; half-soleing with tacks and repairing cheap bottoms of shoes.

COURSE II.—Three hours. Course I required, and I drawing.

Making of waxed ends, sewing soles, sewing and cementing patches, etc., cutting patterns from measures.

COURSE III.—Three hours. Course II required, II drawing.

Stitching uppers, assembling parts, and finishing com-

mon shoes. At least one good pair is required for passing course III.

COURSE IV.—Three hours. Course III shoe work, III drawing required.

Harness repairing and plain sewing, learning parts of harness and methods of making various kinds.

COURSE V.—HARNESS MAKING. Three hours. Course IV required.

New work will occupy the time of this course, and students will be taught to cut and make a complete working set of harness, excepting collars.

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### Bricklaying.

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COURSE I.—Two hours.

In this course excavating and grading will be given in its practical ways. Excavations for drains, dry wells, furnace pits, air ducts, etc., to be given special attention.

COURSE II.—Two hours.

This course will cover piling, brick and concrete footings, specifications for stone work, foundation walls, basement piers, mortar, external walls and rubble.

COURSE III.—Two hours.

This course will cover Ashler, setting stone work, anchors and clamps, cleaning and painting walls. Bonding of all kinds will be given special attention.

COURSE IV.—Two hours.

This course will enable the student to lay pressed brick, mould brick, and any grade of advanced architectural or ornamental brick work.

COURSE V.—Two hours.

This course will prepare the student to construct all classes of arches and hollow wall. The use and advantage of the arches and walls will be given special attention. Colored mortar, chimneys, flue lining, timbles and cold air ducts are specialties.

COURSE VI.—Two hours.

In this course fire walls, ventilators, setting iron work,



setting cut stone, terra cotta, and specifications for laying masonry in freezing weather will be given.

COURSE VII.—Two hours.

This course will be a review of the preceding courses and specifications for fireproofing and terra cotta trimming will be given students in its simplicity.

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### **Lathing and Plastering.**

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COURSE I.—Two hours.

This course shall cover the kind of material used, how mixed for good quality and bad quality work. One coat and three coat work will be discussed.

COURSE II.—Two hours.

In this course sand finish, hard finish, white coat, pebble dash, etc., will be given.

COURSE III.—Two hours.

This course will comprise specifications for both metal and wood lath, how put on both iron and wood walls.

COURSE IV.—Two hours.

This course will be a review of the foregoing courses and fire proof floors will be given attention. Each student will be given specifications on plaster cornice.

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### **Wheelwrighting.**

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COURSE I.—Two hours.

This course will cover making spoke gauge, traveling wheel, anvil clamp and other light tools that can be made by students.

COURSE II.—Two hours.

In this course setting up the wheel will begin. Reaming spokes and fitting rim will be given.

COURSE III.—Two hours.

In this course the different styles of rim finishing will receive special attention.

COURSE IV.—Two hours.

This course will acquaint the students with the grades

of hubs and why used. Details and specifications will be used.

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### **Broom Making.**

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COURSE I.—Two hours.

Three hours are given to learning names of tools used in the trade, kinds of material, dyeing and separating the hull from inside.

COURSE II.—Separating No. 1 hull from No. 2 hull, and No. 1 inside from No. 2 inside.

All grades of materials will be used and special attention is given in selecting material for high-grade brooms.

COURSE III.—CUTTING AND STEMMING.

This is to give the student knowledge of how to build up the inside of the broom and to make it stout, long or short.

#### SECOND YEAR.

COURSE IV.—WIRING AND STITCHING.

COURSE V.—FANCY WORK.

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### **Department of Industries.**

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J. W. LANDRETH, *Head of Departemnt.*

This department is run primarily from a commercial point of view to accomplish a three-fold purpose, viz: to furnish revenue to the college, to give employment to needy and deserving students, and to supplement by practical work the theoretical instruction of the class-room.

The department comprehends the following industries:

*Broom Factory.* The broom factory is equipped with all the necessary machinery for converting the broom-corn, raised on the farm, into the most useful article of the household—the broom. The college finds a ready market for the output of the factory in its immediate vicinity.

*Brick Yard.* The brick yard is equipped with a power brick-machine made by J. C. Steele & Sons, Statesville, N.

C., a repress for making pressed brick, two Steele's patent trucks, hack boards and brick covers. The machinery is propelled by a 25-horse-power Atlas automatic engine of the latest design and a 30-horse-power Atlas return tubular boiler of the newest pattern. There is also a dry kiln in course of construction which will, when completed, enable the plant to be operated during the entire year.

*Canning Factory.* A canning factory will be put in during the summer for the purpose of putting into marketable form the surplus vegetables which are not sold in the raw state. The department makes its own cans in a shop connected with the factory.

*Brick Laying and Plastering.* The department takes contracts along this line so that the students may not only have an opportunity to learn to make brick, but also to build the product of their own labor into neat and imposing structures. He is thus able to trace, with delight, the crude clay, from a barren field or worthless bottom, through the various processes of the brick-yard to the magnificent edifices on the thoroughfares of Greensboro.

*House Building, Heating and Plumbing.* This line of work not only furnishes a ready market, for raw material, such as brick made by the college, but also serves to give the student practice in actual house-building and contracting. The department is well equipped for this kind of work.

*The Farm.* A farm of 125 acres, is well stocked, and equipped with the most improved farm machinery and labor-saving devices. Corn, wheat and potatoes are the most important crops, while vegetables are grown to such an extent as the market demands.

A ninety-ton silo has been erected which is filled with corn silage each year which is cut in the field with a corn harvester and cut up for the silo by a St. Albans shredder.

*The Green Houses.* The college has three greenhouses: one for forcing a variety of flowers, such as roses, hyacinths, freesias, ferns, narcissus, palms, and other rare plants; another, used exclusively for the forcing of carna-





INDIAN CORN

FARM VIEWS.





tions for market, and a third, for forcing early vegetables.

*The Dairy.* The dairy building and apparatus for instruction purposes is also used by the Department of Industries for the separation and bottling of milk for market and for manufacturing butter and cheese. The college has a herd of thirty-eight cattle.

*The Piggery.* The piggery is well equipped and modern. It is stocked with pure bred and grade Berkshires and Polan-China hogs.

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### **The Academic Department.**

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JAMES B. DUDLEY,  
CHARLES H. MOORE,  
S. P. SEBASTIAN,

*English Grammar.*—The aim is to enable the student to speak and write the English language correctly. Recognizing the fact that grammar drill develops in students logical habits of thought, besides giving them greater command of language, special attention will be given to the analysis and construction of sentences and to the principles of elementary composition.

*Arithmetic.*—Instruction will be given in the principles that underlie the various classes of problems, thus teaching the student to rely upon himself and not upon rules.

*U. S. History.*—The leading facts, causes and sequences showing the growth of our country and national history, will be studied with a view to develop true patriotism.

*Other Branches of Study.*—Instruction is also given in spelling, reading, writing, and geography.

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### **Mathematics.**

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S. P. SEBASTIAN, *Instructor.*

FALL TERM.

COURSE I.—Five hours. United States Currency, Fractions.



## WINTER TERM.

COURSE II.—Five hours. Relations of Numbers; Ratio and Proportion, Equation, Compound Numbers.

## SPRING TERM.

COURSE III.—Five hours. Longitude and Time, Practical Measurements, Metric System.

## FALL TERM.

COURSE IV.—Five hours. Percentage, Interest, Discount.

## WINTER TERM.

COURSE V.—Five hours. Stocks and Bonds, Proportional Parts, Partnership, Involution, Evolution.

## SPRING TERM.

COURSE VI.—Five hours. Mensuration, Compound Proportion, Insurance, Exchange, Specific Gravity, Introduction to Algebra. Text-book: Colaw & Ellwood's Advanced School Arithmetic.

COURSE VII.—Algebra. Five hours. Course VI in Arithmetic required.

This course comprises the elements of Algebra through quadratics. All unnecessary matter is left out, and the application of each principle is pointed out. The first term takes the work through fractions. Text: Milne's Elements.

COURSE VIII.—ALGEBRA. Five hours. Course VII required. Text as above.

Beginning at simultaneous equations, and completing quadratic equations.

COURSE IX.—PLANE GEOMETRY. Five hours. Course VI required.

Well's Elements are used in this course, omitting many propositions not easily applied. This course finishes book I. Text: Wells.

COURSE X.—GEOMETRY. Five hours. Course IX required.

Continuation of Course IX. Completing books II and III.

COURSE XI.—GEOMETRY. Five hours. Course IX required.

This course completes books IV and V, and reviews the whole work. Elementary conic sections are also given.

COURSE XII.—SOLID GEOMETRY. Five hours. Course XI required.

Wells' Solid Geometry is used and the practical parts only are required. Special attention is given to finding areas and volumes of various solids.

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### Commercial Geography.

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COURSE I.

A course in Commercial Geography of the United States, British America, Mexico, Central America, West Indies, South America.

COURSE II.—Europe, Great Britain and Ireland, Asia, Africa, Australia and Oceanica is given to first year students. Maury's Manual Geography is the textbook used.

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### English.

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CHARLES H. MOORE, *Instructor*.

FIRST YEAR—FALL TERM.

COURSE I.—Five hours. The Sentence, The Paragraph, Dictation Exercises, Abbreviations, The Comma, Constructions, Oral and Written Compositions.

WINTER TERM.

COURSE II.—Course I required. Five hours. The Two Parts of a Statement, Proper and Common Names, When to Use Capital Letters, Number and Possessive Forms, Words that Describe, Transitive and Intransitive Verbs, Composition Work.

SPRING TERM.

COURSE III.—Course II required. Five hours. Letter-writing and Other Composition Exercises. Book: Hyde's, Part II.

## SECOND YEAR—FALL TERM.

COURSE IV.—Course III required. Five hours. The Sentence, Subject and Predicate, The Different Parts of Speech, Phrases and Clauses.

## WINTER TERM.

COURSE V.—Course IV required. Five hours. Sub-division of Parts of Speech and Inflection, Syntax, Structure and Analysis of Sentences.

## SPRING TERM.

COURSE VI.—Course V required. Five hours. Composition Work and the Study of the English Language. Book: Hyde's, Part II.

## THIRD YEAR—FALL TERM.

COURSE VII.—Course VI required. Five hours. The Art of Writing English, Grammatical Phases of Writing English, Organizing the Theme, Choice of Words, Composition Work.

## WINTER TERM.

COURSE VIII.—Course VII required. Five hours. Source of English Vocabulary, Letter Writing, Reproduction, Abstract, Narration and Description, Exposition and Argument. Book: "First Book in Writing English."—*Lewis*.

## SPRING TERM.

COURSE IX.—Course VI required. Five hours. Civil Government (complete). Text-book. Peterman.

## FOURTH YEAR—FALL TERM.

COURSE X.—Course VI required. Five hours. Logic (complete.) Text-book: W. S. Jevons.

## WINTER TERM.

COURSE XI.—Course VI required. Five hours. Political Economy (complete). Text-book: W. S. Jevons.



### **Night School.**

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In order to extend the usefulness of this institution as far as possible among young men who are without means or friends to assist them, a night school will be conducted that will permit students to work during the day and attend school at night. While the opportunities for advancement in the night school will not be equal to those of the day school, the best attention that the conditions will permit will be given, and students attending the night school eventually may arrange to enter the day school. Courses completed in the night school will receive the same credit as if completed in the day school.

To enter the night school the applicant should be 16 years of age; and he should first secure work. This may be done by sending written application immediately to "The Department of Industries, A. & M. College, Greensboro, N. C."

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### **Medals and Scholarships.**

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Through the kindness of Prof. H. E. Hagans, former Professor in charge of our English Department, Principal of the State Normal School, Goldsboro, N. C., we are permitted to announce that a gold medal, known as the "Hagans Medal" will be awarded to the members of the graduating class of 1904, who has the best general record in English subjects.

Medals will also be given for similar proficiency in the Agricultural and in the Mechanical Departments about the beginning of the session.

The Eugene Dietzgen Co., of New York, has given a full set of drawing instruments to the student making the best set of drawings.

## Organizations.

The growth of the institution made is necessary for two general literary organizations, known as "The Agricultural Literary Society," and "The Mechanical Literary Society." The Y. M. C. A. is an organization of great and most wholesome influence among the students.

### The Agricultural Literary Society.

#### OFFICERS.

P. J. Greenlee.....	President
W. M. Lamb.....	Vice-President
J. M. Rand.....	Secretary
J. I. Johnson.....	Treasurer
J. R. Ellis.....	Chaplain
T. L. Ramseur.....	Critic
B. P. Holly.....	Editor

#### Y. M. C. A.

J. R. Ellis.....	President
B. P. Holly.....	Vice-President
Robert Turner .....	Secretary
L. L. Ramseur .....	Corresponding Secretary
M. Saunders .....	Treasurer

### The Mechanical Literary Society.

A. A. Oldham .....	President
E. W. Richie.....	Vice-President
T. B. Hooper.....	Secretary
—, —, —.....	Treasurer
W. T. Edwards.....	Critic
E. A. Prather.....	Editor

## LIST OF STUDENTS.

### FIRST YEAR CLASS.

Alexander, Wm. ....	Concord, N. C.
Alston, A. J. ....	Warrenton, N. C.
Artis, W. B. ....	Goldsboro, N. C.
Baldwin, J. E. ....	Greensboro, N. C.
Brean, E. E. ....	Liberty, N. C.
Brown, E. W. ....	Jacksonville, Fla.
Caesar, Robert ....	Mt. Airy, N. C.
Campbell, D. C. ....	Austin, N. C.
Carrigar, Thomas ....	Concord, N. C.
Carrigar, William ....	Concord, N. C.
Chestnut, Patrick ....	Wilmington, N. C.
Clark, E. D. ....	Washington, D. C.
Cotton, R. R. ....	Greensboro, N. C.
Coulter, Carlos ....	Newton, N. C.
Crockett, Ross ....	Greensboro, N. C.
Crowe, S. C. ....	Spartanburg, S. C.
Davis, C. G. ....	Cottonville, N. C.
Davis, Jonah ....	Raleigh, N. C.
Dillard, Thomas ...	Greensboro, N. C.
Donnell, Clyde ....	Greensboro, N. C.
Duck, Thos. E. ....	Graham, N. C.
Dunston, A. L. ....	West Raleigh, N. C.
Edwards, Robert ...	Kinston, N. C.
Evans, G. F. ....	Mint Hill, N. C.
Fisher, B. L. ....	New Bern, N. C.
Flow, Baxter ....	Mint Hill, N. C.
Fondsworth, John ....	Asheville, N. C.
Foster, Charles ....	Greensboro, N. C.
Foster, J. O. ....	Greensboro, N. C.
Fouchee, Clifton ....	Greensboro, N. C.
Foy, Monroe ....	Kernersville, N. C.
Friday, E. S. ....	Greensboro, N. C.
Fronberger, M. ....	Gastonia, N. C.
Gaines, K. L. ....	Concord, N. C.
Galloway, E. ....	Greensboro, N. C.
Green, W. N. ....	Warrenton, N. C.
Greenlee, George ....	Asheville, N. C.
Gwyn, J. A. ....	Winston, N. C.
Hansley, W. ....	Rocky Point, N. C.



Haynes, Harrison	Asheville, N. C.
Hinton, A. R.	Greensboro, N. C.
Jackson, J. G.	Carthage, N. C.
Johnson, Charles	Hickory, N. C.
Jones, E. R.	Weldon, N. C.
Jordan, J. F.	Greensboro, N. C.
Koger, J. H.	Reidsville, N. C.
Lamb, J. L.	Herring, Va.
Leach, Thomas	Pittsboro, N. C.
Lee, E. L.	Greensboro, N. C.
Mock, H. G.	Harris, N. C.
Monroe, D. H.	New Berne, N. C.
Morgan, W. T. O.	Bachelor, N. C.
Morris, Charles A.	Asheville, N. C.
Morrissey, John	Wilmington, N. C.
Morrison, C. R.	Rheinhardt, N. C.
Murphy, R. M.	Asheville, N. C.
Murphy, T. E.	Statesville, N. C.
Murrill, R. D.	Mariposa, N. C.
McDonald, James	Dillsboro, N. C.
McClain, W. D.	Huntsville, N. C.
McCaskill, N. E.	Pegues, N. C.
McCaskill, Samuel	Pegues, N. C.
McCaskill, Wiley	Pegues, N. C.
McGee, J. C.	Kenansville, N. C.
McLaurin, Henry	Clio, S. C.
Nelson, Fred	Greensboro, N. C.
Pair, W. D.	Raleigh, N. C.
Patillo, S. B.	Elams, N. C.
Peace, W. C.	Carthage, N. C.
Pharr, William	Mint Hill, N. C.
Prather, Joseph	Raleigh, N. C.
Reaves, R. L.	Pittsboro, N. C.
Robeson, M.	Saxapahaw, N. C.
Robinson, J. F.	Mint Hill, N. C.
Robinson, T. E.	Laurinburg, N. C.
Russell, James	Graham, N. C.
Saulter, W. D. S.	Raleigh, N. C.
Sanders, M. S.	Spartanburg, S. C.
Scott, Chas. A.	Goldsboro, N. C.
Scott, Chas. R.	Oxford, N. C.
Scurlock, B. J.	Pittsboro, N. C.
Sigmon, Willie	Asheville, N. C.
Spaulding, J. W.	Elkton, N. C.
Swinson, M. M.	Winston, N. C.
Troy, A. J.	Wilmington, N. C.

Truman, J. C.....	Durham, N. C.
Turner, E. L.....	Walnut Cove, N. C.
Waugh, George .....	Greensboro, N. C.
Whitted Fred .....	Goldsboro, N. C.
Whitted, Logan .....	Greensboro, N. C.
Wilkins, W. H.....	Dayton, N. C.
Williams, Col. B.....	Wilmington, N. C.
Winley, S.....	Winthrop Mills, N. C.
Womble, Graham .....	Greensboro, N. C.
Wooden, A. J.....	Moncure, N. C.

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### SECOND YEAR CLASS.

Carter, Fred .....	Reidsville, N. C.
Coble, W. D.....	Rock Creek, N. C.
Fonville, H. F.....	Goldsboro, N. C.
Ford, Reid .....	Rutherfordton, N. C.
Gill, Chas. R.....	Fayetteville, N. C.
Green, George .....	Raleigh, N. C.
Greenlee, A. L.....	Asheville, N. C.
Greenlee, N. B.....	Asheville, N. C.
Harris, J. H.....	Youngsville, N. C.
Hawkins, J. A.....	Carey, N. C.
Howell, H. A.....	Asheville, N. C.
Keck, Willie .....	Greensboro, N. C.
Lee, James .....	Thomasville, N. C.
Lee, John .....	Thomasville, N. C.
Moore, T. W.....	Richardson, N. C.
McLaurin, William .....	Clio, S. C.
McRae, S. D.....	Thomasville, N. C.
Orum, M. F.....	New Bern, N. C.
Rand, J. M.....	West Raleigh, N. C.
Richardson, J. R.....	Pittsboro, N. C.
Roach, C. J.....	Vanceboro, N. C.
Stewart, Needam .....	Laurinburg, N. C.
Stinson, G. A.....	Gastonia, N. C.
Washington, J. H.....	Tuskegee, Ala.
Whitney, O. G.....	Smithfield, N. C.
Williams, M. W.....	Halifax, N. C.

### THIRD YEAR CLASS.

Carter, W. P.....	Reidsville, N. C.
Ellis, J. R.....	Due West, S. C.

Godly, Charles .....	New Berne, N. C.
Holly, B. P.....	New Berne, N. C.
Hooper, L. B.....	Ruffin, N. C.
Johnson, J. I.....	Oregon, N. C.
Johnson, W. T.....	Oregon, N. C.
Jones, G. W. ....	Moore, N. C.
Lamb, Wilson .....	Herring, Va.
Morris, F. M.....	Reidsville, N. C.
McLeod, C. F.....	McNair, N. C.
Prather, E. A.....	Raleigh, N. C.
Richie, E. W.....	Greensboro, N. C.
Turner, R. R.....	West Raleigh, N. C.
Watson, P. P.....	Grove Hill, N. C.

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#### FOURTH YEAR CLASS.

Chance, W. C.....	Parmelee, N. C.
Day, Thomas .....	Asheville, N. C.
Edwards, W. T.....	Siler City, N. C.
Greenlee, Percy G.....	Asheville, N. C.
Jones, L. A.....	Rocky Point, N. C.
Oldham, A. A.....	Greensboro, N. C.
Ramseur, L. L.....	Newton, N. C.
*Reaves, W. V.....	Glendon, N. C.

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\*Deceased.



## LIST OF GRADUATES.

## 1899.

- Cheek, W. T. C.....Lawrenceville, Va.  
Mechanic, St. Paul's N. & I. School.
- Cunningham, I. S.....Tallahassee, Fla.  
Mechanic, State N. & I. College.
- Curtis, A. W.....Institute, W. Va.  
Agriculturist, West Va. Col. Institute.
- Falkener, E. L.....Enfield, N. C.  
Farm Supt., J. K. Brick School.
- Joyner, J. M.....Philadelphia, Pa.
- Robinson, P. E.....Greensboro, N. C.  
Assistant, Dept. Agr. and Chem. A. & M. College.
- Watson, A.....Greensboro, N. C.  
Mech. Dept., A. & M. College.

## 1900.

- \*Best, C. H.....Newport News, Va.
- Green, J. H.....High Point, N. C.  
Industrial Dept., N. & I. School.
- Moore, R. D.....Morganton, N. C.  
Teacher.
- Flummer, E. S.....Brooklyn, N. Y.  
Mechanic.
- \*Quick, J. R.....Greensboro, N. C.
- Robinson, Chas. D.....Greensboro, N. C.  
Mech. Dept., A. & M. College.

## 1901.

- Colson, E. F.....Enfield, N. C.  
Agriculturist, J. K. Brick School.
- Edwards, G. A.....Raleigh, N. C.  
Teacher, Manual Training, Shaw University.
- Grimes, Frances E.....Charlotte, N. C.  
Wharton N. & I. School.

## 1902.

- Bullock, Mrs. H. A.....Greensboro, N. C.  
Housekeeper.

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\*Deceased.

- Henderson, A. P.....Hillsboro, N. C.  
Poultry Farmer.
- Helper, T. H.....Greensboro, N. C.  
**Dairyman,**
- Holcombe, A. J. P.....Raleigh, N. C.  
Agriculturist, D. and B. Institute.
- Garrett, Mrs. F. E.....Greensboro, N. C.  
Teacher.
- Mebane, A. L.....Princess Anne, Md.  
Agriculturist, Princess Anne Academy.
- Quinn, Wm .....Raleigh, N. C.  
Mechanic, D. and B. Institute.
- White, W. A.....Hillsboro, N. C.  
Poultry Farmer.

## 1903.

- Alexander, W. G.....Greensboro, N. C.  
Machinist, A. & M. College.
- Amey, Chas. C.....Greensboro, N. C.  
Blacksmith, A. & M. College.
- Burnett, A. C.....High Point, N. C.  
Agriculturist, High Point N. & I. School.
- Forney, H. G.....Greensboro, N. C.  
Mechanic.
- Haywood, Berk .....Raleigh, N. C.  
Mechanic.
- Holmes, J. W.....High Point, N. C.
- Hunter, C. C.....West Raleigh, N. C.
- Jefferson, C. B.....Warrenton, N. C.
- McLendon, J. B.....Aiken, S. C.  
Mechanic, Schofield N. & I. School.
- Robinson, R. R..... Claremont. Va.  
Agriculturist,
- Robinson, W. F.....Greensboro, N. C.  
Florist, A. & M. College.
- Yores, Edw. ....824 N. 13th, Philadelphia, Pa.

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## PREPARATORY DEPARTMENT.

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### CLASS OF 1900.

- Alston, Sarah V.....Raleigh, N. C.
- Carter, Alma J.....Reidsville, N. C.  
Teacher.
- Colley, J. C.....Durham, N. C.

Cotton, Lillian .....Hampton, Va.  
Student, Hampton Institute.

Davis, L. E. ....Wilmington, N. C.

Davis, Mary O. ....Hillsdale, N. C.

Davis, R. T. ....Wilmington, N. C.

\*Dudley, S. Inez .....Worcester, Mass.

Dunham, P. W. ....Euloria, S. C.

Farrington, Bertha .....Greensboro, N. C.

Hooper, T. H. ....Laurinburg, N. C.

Jeffreys, Annie F. ....Petersburg, Va.

Student, N. & I. School.

Jones, Carrie E. ....Raleigh, N. C.

Jones, Estella D. ....Chapel Hill, N. C.

McKenzie, Sarah P. ....Greensboro, N. C.

Teacher.

Pritchett, Nannie L. ....Greensboro, N. C.

Quick, Knox S. ....Laurinburg, N. C.

Richardson, M. L. ....Wilmington, N. C.

Simmons, Victor W. ....Statesville, N. C.

Strong, Andrew J. ....Matrimony, N. C.

Willis, Josie H. ....Wilmington, N. C.

Wilson, Lillie B. ....Hillsboro, N. C.

Witherspoon, Annie F. ....Raleigh, N. C.

Wooten, David .....Princeville, N. C.

Wright, Annie C. ....Danville, N. C.

#### CLASS OF 1901.

Gwyn, Ceil B. ....Raleigh, N. C.

Jones, Georgia .....Hampton, Va.

Student, Hampton Institute.

Jackson, N. E. ....Carthage, N. C.

Logan, Elkwood .....Gale, N. C.

Lipscombe, Hattie B. ....Raleigh, N. C.

Student, Shaw University.

Mapp, Sadie .....Philadelphia, Pa.

Palmer, Dinah .....Church Hill, N. C.

Rives, W. V. ....Greensboro, N. C.

Rankin, A. E. ....Greensboro, N. C.

Reynolds, Mattie .....Waynesville, N. C.

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\*Deceased.

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In order that this list may be kept accurately, graduates will please inform the President of any change in address, vocation, etc.







## COLLEGE SONG.

(By Mrs. Jas. B. Dudley.)

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Dear A. & M., dear A. & M.,  
A monument indeed  
Around thy base with grateful hearts,  
Behold thy students kneel.  
We bless the power that gave thee  
birth  
To help us in our need;  
We'll ever strive while here on earth  
All loyalty to yield!

(Chorus):

With joy, with joy, dear A. & M.,  
Thy students turn from thee  
To spread thy trophies year by year,  
From Dare to Cherokee.

Dear A. & M., dear A. & M.,  
The signet thou shalt be,  
Set by our great, old commonwealth,  
Proud booster of the free,  
She'd have the record of her worth  
On granite not inscribed;  
Nay; let the children of her birth  
Proclaim it by their lives.

Dear A. & M., dear A. & M.,  
Henceforth our aim shall be,  
By precepts wise, by deeds more sure,  
To bless the State through thee.  
The arts of industry to wield  
Against an idle foe;  
A harvest rich, from ripened fields  
From what thy students sow.